

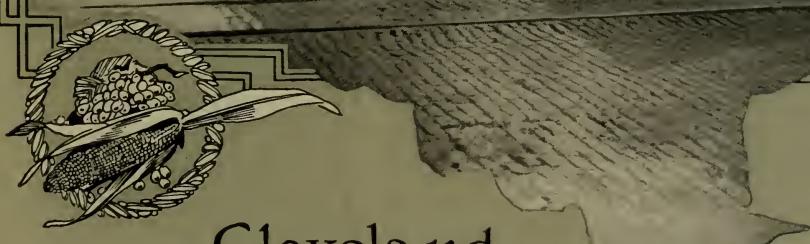
## **Historic, Archive Document**

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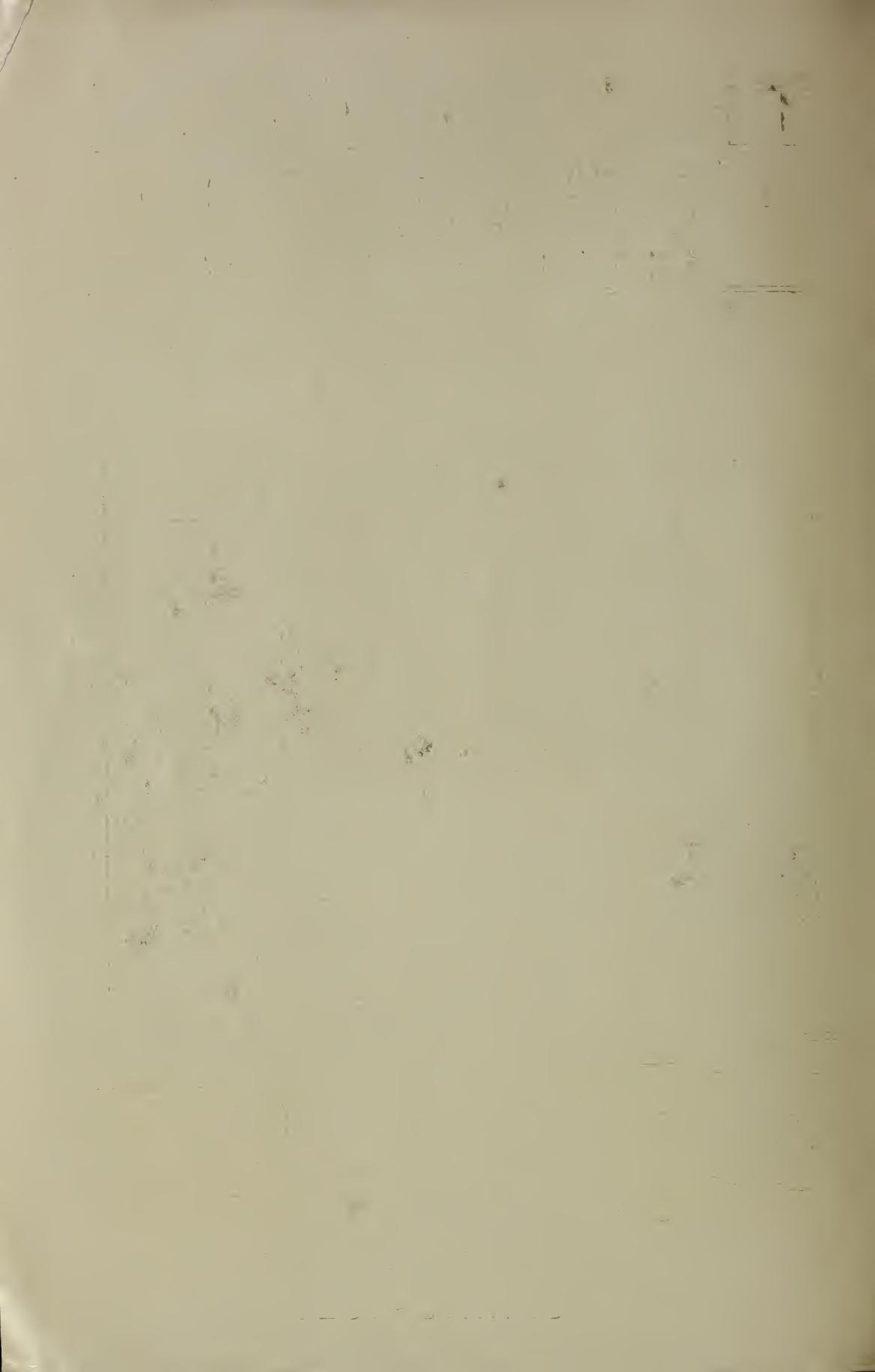


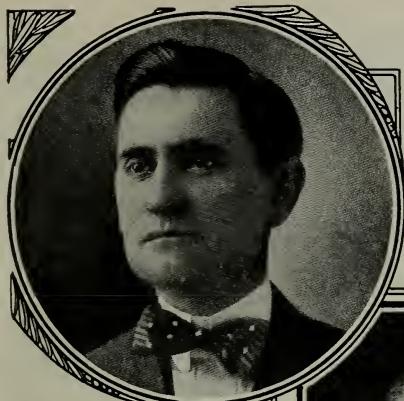
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# THE BOTZUM "BROS. CO." "SEEDS THAT GROW"



Cleveland  
and Akron, Ohio.  
**SPRING - 1920**

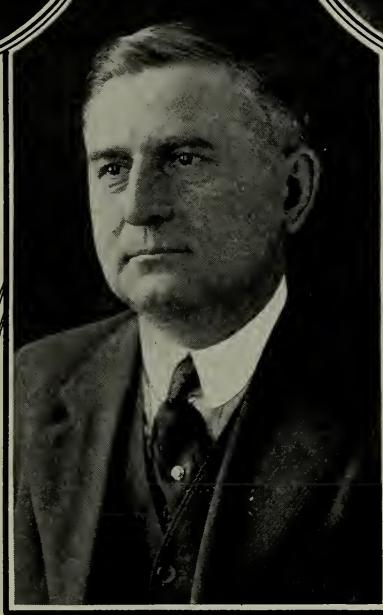




C. C. BOTZUM



L. E. BOTZUM



HARRY BOTZUM

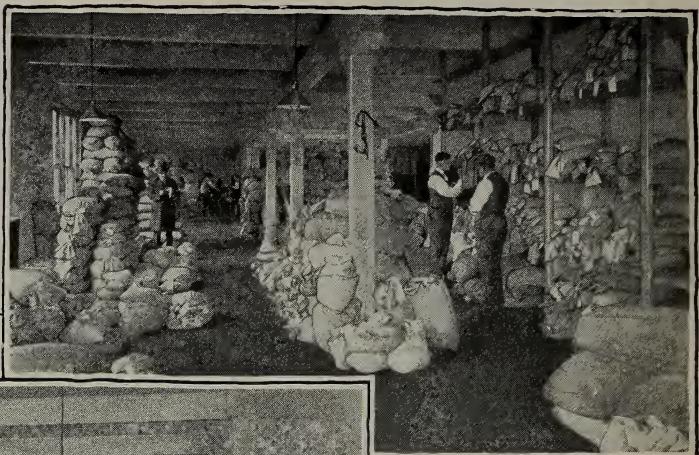


J. C. BOTZUM



A. P. BOTZUM

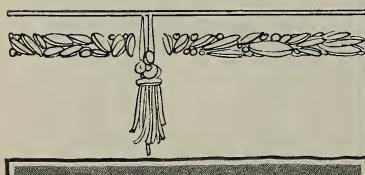
VIEWS OF WHOLESALE DEPARTMENT  
CLEVELAND, OHIO



SEED STOCK ROOM



SEED STOCK ROOM



ELECTRIC PACKET  
FILLING MACHINE  
AND SEED TESTER



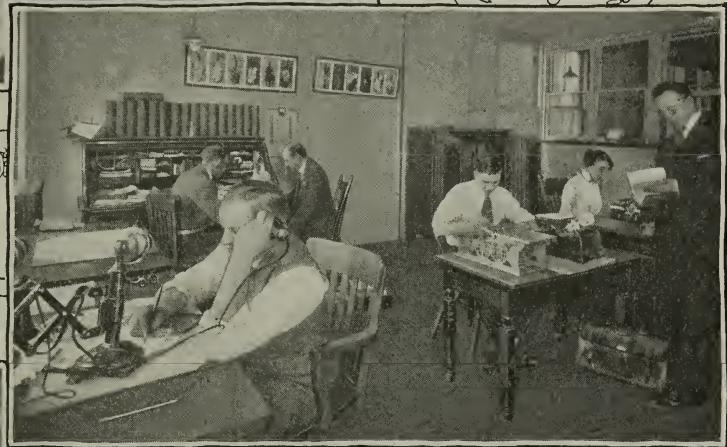
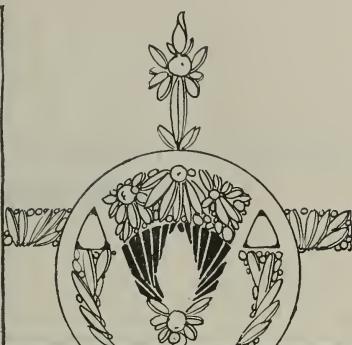
PACKING DEPARTMENT



VIEWS OF OFFICE AND RETAIL DEPARTMENTS  
CLEVELAND AND AKRON, OHIO



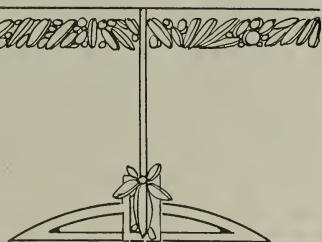
CLEVELAND, OHIO STORE



OFFICE---WHOLESALE DEPARTMENT  
CLEVELAND, OHIO



IMPLEMENT  
DEPARTMENT  
CLEVELAND  
OHIO



RETAIL STORE---AKRON, OHIO



A Summary on the Growth of  
**THE BOTZUM BROS. COMPANY**  
"SEEDS THAT GROW"  
AND WHY THEY GREW

What we were in 1893

What We Are Today

**T**WENTY-SEVEN years ago a small one-story, frame store-room on South Main St., Akron, O., was rented by Harry and Charles Botzum as a seed-store. They called it "The Hole in the Wall"—It was.

However, from this small beginning over a quarter of a century ago, this business has developed into one of the largest and most complete seed, plant and bulb establishments in the world. This has been accomplished by a strict adherence to the broad principle that this business was founded on—of selling only "Seeds that Grow" and giving the purchaser 100 cents in value for every dollar spent.

From coast to coast the reputation of The Botzum Bros. Co. as seed experts is known and respected. Their knowledge gained by years of experience has proven invaluable to thousands of seed purchasers until now the name "BOTZUM" stands as a guarantee for the best obtainable.

At the present time we occupy three complete buildings, two on Main St., Akron, and one at 770-774 Central Ave., Cleveland, which is the main distributing point and is possibly the best equipped seed establishment to be found anywhere. Efficiency is paramount and every known and conceivable device for the scientific inspection of seed and plant life is installed and you can rest assured—absolutely—whatever you may purchase from "BOTZUM" is fertile. There is no guesswork—it either is or isn't—no half-way or doubtful stock can possibly pass these rigid inspections.

In the Cleveland building alone, over 70,000 square feet of space is devoted to seed packing and inspection work. Also one entire floor is occupied by the retail department.

This short summary is given to show that THE BOTZUM BROS. CO. can serve you in any capacity and every order, no matter how small or how large, will receive prompt and careful attention.

*Buy Botzum Seeds and Be Satisfied*

**Come In and See Our Packet-Filling Machine Working.  
We Fill Seed Daily In 5c Packets.  
Always Fresh.**

**SPECIAL OFFER NO. 1**

To anyone sending us 25c, we will mail the following seed:

1 Pkg. Wax Beans	1 Pkg. Lettuce
1 Pkg. Beets	1 Pkg. Carrots
1 Pkg. Radish	1 Pkg. Cucumbers

**SPECIAL OFFER NO. 2**

To anyone sending us 50c, we will mail the following seed:

1 Pkg. Wax Beans	1 Pkg. Cucumbers
1 Pkg. Sweet Corn	1 Pkg. Nasturtium
1 Pkg. Beets	1 Pkg. Sweet Peas
1 Pkg. Radish	1 Pkg. Asters
1 Pkg. Lettuce	1 Pkg. Carnation
1 Pkg. Carrots	1 Pkg. Phlox

**SPECIAL OFFER NO. 3**

To anyone sending us \$1.00, we will mail the following list of seeds:

1 Pkg. Green Beans	1 Pkg. White Raddish
1 Pkg. Wax Beans	1 Pkg. Spinach
1 Pkg. Lima Beans	1 Pkg. Squash
1 Pkg. Table Beets	1 Pkg. Turnip
1 Pkg. Cabbage	1 Pkg. Aster
1 Pkg. Carrots	1 Pkg. Nasturtium
1 Pkg. Sweet Corn	1 Pkg. Sweet Pea
1 Pkg. Cucumber	1 Pkg. Carnation
1 Pkg. Lettuce	1 Pkg. Phlox
1 Pkg. Peas	1 Pkg. Cosmos
1 Pkg. Parsley	1 Pkg. Four O'Clock
1 Pkg. Red Radish	1 Pkg. Candytuft

## SUGGESTIONS TO CUSTOMERS IN ORDERING FROM THIS CATALOG

A reading of the following will prove an aid to you and to us:

**Early Orders:** Our rush season comes in the months of March and April. Orders sent at once secure prompt shipments from our full stocks.

**How to Order:** Write your name, postoffice, state and express office plainly with black ink, on every order, and every time you write to us. Give plain express, mail or freight directions; where none are given, we route the same at buyer's risk.

**Orders are Promptly Filled:** Or in case of delay, notify by postal card. If you do not hear from an order sent us, within a reasonable time, send us a duplicate order, covering date of order, amount of same and form of remittance, your name and full address. If you cover these points in your first letter, a long delay is often saved in tracing.

**Plant, Tree and Small Fruit Orders Must Amount to \$1.** We cannot afford to fill orders of less amount than one dollar, unless in addition to the amount for plants wanted, ten cents is sent. **This Does Not Apply to Seed Orders.**

**Shipping:** We will use our best judgment as to the best way of sending orders when specific directions are not given. On large "postpaid" orders it is better to have them go by express if your town is on a railroad—it is safer. We prepay express charges quoted "postpaid." If special directions in shipping are needed, send them explicitly, and where express or freight office is different from postoffice, so state in space on our order sheet. Paris Green, Nico Fume and other poisons are not mailable, nor are liquids and other insecticides; they must go by express or freight. Seeds do not pack well with nursery stock, because they are liable to get damp and become spoiled; it is better to have them shipped separately.

**Freight or Express:** All express lines in the United States and Canada carry seeds and plants at the special reduced rate of 20 per cent less than general merchandise rates. On moderate sized orders we advise express shipment rather than freight.

**Our Terms:** Are strictly cash with order. We prefer not to send C. O. D., but if wanted by that method customers should enclose one-fourth of the amount in remittance with order.

**Our Responsibility:** It is so manifestly impossible for a seller of any perishable article to be responsible for what may happen to it after it leaves his hands, especially one like seeds, which are planted in the ground under varying conditions of soil and climate, that we, in common with all American seed houses, disclaim responsibility as to the crop which may be raised from seeds which we sell.

At the same time, in case of any failure to secure proper results caused from some inherent fault in the seeds themselves, The Botzum Bros. Co. accepts responsibility not for crop, but to the extent of the amount of money paid for seeds, if immediately advised. Or seeds may be returned. See below.

We wish it understood that all our seeds are sold under the following general non-warranty:

**We do not warant** in any way, expressed or implied, the contents or the description, quality, productiveness or any other matter of any seeds, bulbs, plants, shrubs or trees sold by us, and we will not be in any way responsible for the crop. If the purchaser does not accept these goods on above terms, no sale is made thereof, and he must return them at once, and money will be refunded. Subject to above conditions, we make this sale at the moderate prices at which we sell our goods.

THE BOTZUM BROS. CO., Inc.

### COMPLAINTS

Mistakes will occur in the most carefully systematized business. Sometimes it may be our fault, sometimes the buyer's.

If you have any cause for complaint, write us about it and we will try to adjust it to your satisfaction.

Dealers, Market Gardeners, Farmers, Clubs or Societies who buy seeds in large quantities can save money by sending us a list of their requirements for special prices. Often-times we can make much lower prices for large quantity than those quoted in this catalog. Send in your large list for estimates.

**WE DO NOT SELL ALL THE SEEDS THAT ARE SOWN,  
BUT WE SELL THE BEST THAT ARE GROWN**

**THE BOTZUM BROS. CO.**

**"HIGH GRADE BULBS"**

**772-774 Central Ave., Cleveland, O.**

Warehouses and Elevators at Akron, O.

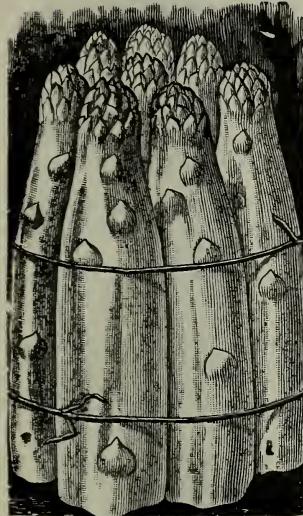
**"SEEDS THAT GROW"**

**27 South Main St., Akron, O.**

Proving and Testing Grounds at Botzum, O.  
**BOTH PHONES**



### "BIG CROP" VEGETABLE SEEDS FOR 1920



Columbian Mammoth  
White Asparagus

- ASPARAGUS**
- Per Packet, any variety, 5 cents
- Conover's Colossal.** A standard sort; color deep green, quality good.  
Oz., 10 cts.;  $\frac{1}{4}$  lb., 25 cts.; 1 lb., 75 cts.
- Palmetto.** Of large size, even and regular in growth, and appearance; bright green color. Oz., 10 cts.;  $\frac{1}{4}$  lb., 25 cts.; 1 lb., 75 cts.
- Barr's Mammoth.** Stalks very large with few scales; of light color.
- A desirable market variety. Oz., 10 cts.;  $\frac{1}{4}$  lb., 25 cts.; 1 lb., 75 cts.
- Columbian Mammoth White.** Produces pure white shoots; requires no artificial blanching and brings in market better prices than any other sort. Oz., 10 cts.;  $\frac{1}{4}$  lb., 25 cts.; 1 lb., 75 cts.

### ASPARAGUS ROOTS

#### Plant either in Spring or Fall

No effort put forth in the garden will bring more pleasure and satisfaction than an established Asparagus bed, if that is thoroughly prepared according to the following directions. A bed 20 by 50 feet set with 1,000 two-year-old roots will last for years and furnish an abundance:

**Culture Directions.** Select a good sandy loam, plow the ground as deep as possible, dig out 12 inches deep, put in a layer of 4 inches of good, strong stable manure, and press down; then fill in with good, rich, black loam to the top of the bed; sow on the top of the bed 100 lbs. of Kainit to 1,000 square feet of bed; incorporate this thoroughly to depth of 3 inches. After leveling bed off even, stretch a line the length of bed 9 inches from the edge, and with a spade cut a furrow 8 inches deep, set a row of plants along the trench 9 inches apart, with the crowns of the roots 2 inches below the surface, then cover up, make even and plant other rows 9 inches apart.

**Colossal.** Two years old.....  
**Palmetto.** Two years old.....  
**Barr's Mammoth.** Two years old.....  
**Columbian Mammoth White.** Two years old.....

	Per 25	Per 100	Per 1000
	75c	\$2.00	\$10.00
	75c	2.00	10.00
	75c	2.00	10.00
	75c	2.00	10.00

### GENERAL LIST OF BEANS

**Culture.** Beans are somewhat tender, but it often pays to take some risks. Plant in warm, loamy soil at the beginning of settled, warm weather in Spring and at intervals for succession until August. Rows may be made 2 feet apart, and the Beans planted not more than 2 inches deep and several inches apart in the drills, or 3 or 4 Beans in hills 6 to 8 inches apart. Cultivate and hoe frequently, always however, when the vines are perfectly dry. In hoeing draw the soil up towards the rows or plants. For String Beans gather the pods clean as fit for use. The plants will remain all the longer in the bearing.

### INOCULATION

### GARDEN BEANS

Garden beans should be inoculated the same as all other legumes.

The bacteria attach themselves to the roots forming nodules—simply colonies, masses, of germs. These germs take nitrogen from the air, supplying it to the plant, causing increased growth, more prolific bearing, higher food value, and above all, earlier maturity.

Inoculated beans come into bearing earlier, often 10 days to 2 weeks earlier than when not inoculated.

Inoculate with Botzum Brothers' Standard Inoculating Bacteria.

When ordering state bacteria is wanted for garden beans.

### PRICES

Inoculated Beans  
Inoculation increases this  
crop.

Small Size.....	50 cents
Large Size.....	75 cents

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

### Bush Beans

Bush Beans are the type generally grown for early string or Snap Beans, both for home use and for market. They come in two general classes, the Green Podded and the Yellow, or Wax-Podded varieties. It is a question which type is the better. Some people like one and some the other. Some markets prefer the wax pods while others prefer the green pods. There is really very little difference in flavor, yield, earliness, hardness or quality between the yellow pod and green pod Beans. But still different gardeners and different markets have their preferences, so we must grow both kinds.

### Green Pod Bush Beans

Per Packet, any variety, 5 cents. Per Carton, 10c  
All Green Pod Beans, 1lb., 30 cts.; 100 lb., \$25.00.

**New Giant Stringless Green Pod.** This is a great improvement on the old time popular favorite Valentine Bean. The pods are fully one-third longer, averaging 5 to 6 inches in length; absolutely stringless, very crisp, round, full and fleshy. It is enormously productive, its handsome pods being ready for market a few days earlier than old Valentine. We confidently recommend it either for the home garden or as a profitable variety to grow for market.

**Burpee's New Stringless Green Pod Beans.** Crisp, tender, luscious flavor. Handsome light green pods, are ready to market TWO WEEKS EARLIER than the Red Valentine. Pods are full, fleshy and produced in great abundance, remaining long in an edible condition.

**Improved Early Red Valentine.** A profitable sort for private use or market; very early; round fleshy pods.

**Full Measure.** Prolific and produces the pods early; long, straight and handsome, are meaty and good quality; is very thick, flat or almost a semi-round. Quality, stringlessness and productiveness should be sufficient to recommend this to every planter.

**Bountiful.** This new, green podded Bush Bean is a heavy cropper and very early, of fine shape, stringless, and good quality. Its hardiness and great productiveness make it one of the very best Bush Beans.

**Keeney's Stringless Refugee.** (48 days.) Here is a new bean of exceptional merit, exceedingly prolific, fine quality, rust resistant, and an ideal market variety. Pods round, long and entirely stringless.

**Long Yellow Six Weeks.** Early; leading market variety; straight flat pods.

**Refugee, Extra-Early.** Similar to the Late Refugee, or 1,000-to-1, except that it is about ten days earlier. Pods round, fleshy, almost straight, and of uniform size. A good cropper and shipper.

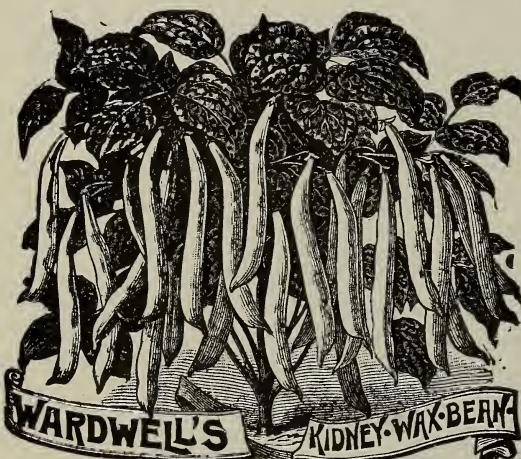
**Refugee, or 1,000-to-1.** Late; largely grown for main crop; very productive and tender; highly esteemed for use as pickles.

**Broad Windsor.** (English Bean.) As this bean is very hardy it should be planted as early as the ground will permit, five or six inches deep in row three feet apart, and plants four feet apart. Dry beans very large and yellowish green.

### Wax Pod or Yellow Pod Varieties

All Yellow or Wax Pod Beans, 30c lb.; \$25.00 per 100 lb.

**Keeney's Rustless Golden Wax.** A strong grower; free from rust. Pods meaty and well filled, semi-round, rich yellow, fine quality; ENTIRELY STRINGLESS.



**Refugee Wax.** A superior bean for home use. Pods are long, round and yellow; are thick meated, perfectly stringless and of excellent flavor. Dry beans are mottled dark drab.

**Hodson Wax.** The pods are straight and average about 7 inches in length; color, clear light yellow. Vines are very vigorous and well filled with pods that are entirely free from rust and blight.

**Wardwell's Kidney Wax.** A great favorite; very hardy, productive; free from rust; long, flat, waxy, yellow pods; early.

**Improved Golden Wax.** Very prolific; straight, thick pods of a golden yellow color; free from rust.

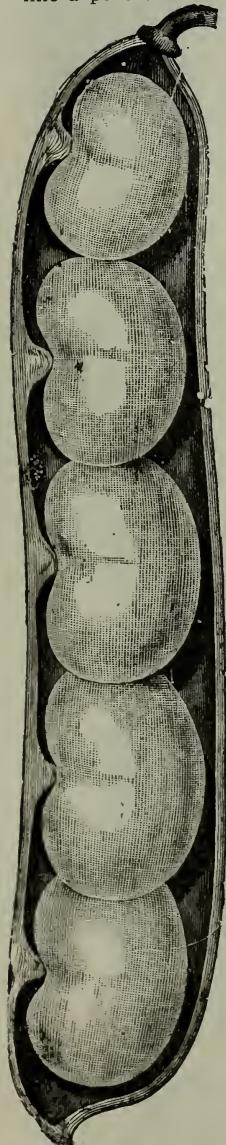
## BEANS—Continued

**Sure Crop Stringless Wax.** is a dwarf-growing variety; strong, vigorous vines producing early, rich yellow pods of extra size, measuring seven to seven and one-half inches long, more than one-half inch wide and nearly one-half inch thick, and of excellent quality.

**Davis Kidney Wax.** The vines are vigorous, hardy, of upright growth and bear near the center, many clusters. Rustless, and of clear waxy white color; when young are entirely stringless, brittle, crisp and tender. The dry beans are large, kidney-shaped, very attractive, and excellent for baking.

**Prolific Black Wax.** The old standard Black Wax Bush Bean. It is so good that it is worthy of special notice. The pods are round, brittle, of handsome golden yellow color, and of buttery flavor when cooked.

**Pencil Pod Black Wax.** Pencil Pod Black Wax grows a taller, stronger and more vigorous bush than the Improved Prolific Black Wax, long, slender, straight, handsome pods, shaped very much like a pencil.



**Burpee's Kidney Wax.** More robust in growth and more prolific than the popular Wardwell's Kidney Wax,—with longer pods which are more handsome in appearance, entirely stringless, more fleshy, and of much finer quality. The dry seed is kidney-shaped like Wardwell's, but a little more rounded and more nearly pure white in color, having only slight brownish markings around the eye.

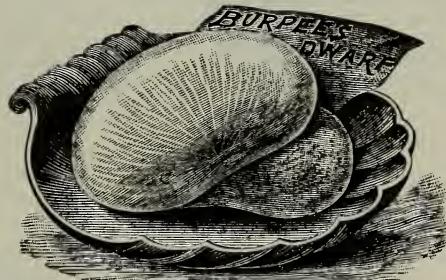
**Currie's Rust Proof Wax.** An excellent Wax Bean, in every respect. Rust proof, tender, thick, flat pods of very good quality. Very little string in early stages, developing a little when nearing maturity. Fit for table use 47 days from planting.

## LIMA BEANS

## Three Fine Bush Lima Beans

**Culture.** Selected land that is especially warm, rich and well supplied with vegetable fibre or humus. Plant as soon as the soil has become warm in Spring. Make the rows 2 feet apart and give to each plant 6 inches on the row. A top dressing of poultry manure, ashes or some good fertilizer or some good compost around the plants will be of much benefit in hastening maturity and increasing the yield.

**Burpee-Improved Bush Lima.** This has uniformly larger pods than Burpee's Bush Lima, while the pods contain more Beans which are thicker and remain green even in the dry stage. The plants are very prolific, bearing pods in clusters of from 5 to 7. The individual pods average 5 to 6 inches long and contain from 5 to 7 beans. The beans are exceedingly thin-skinned and of delightful flavor. They almost "melt in your mouth," to use a popular expression. Lb., 35 cts.; per 100 lb., \$30.00.



Early Jersey Lima

**Fordhook Bush Lima.** It is entirely distinct in habit of growth. The stiffly erect bushes branch freely and bear tremendous crops. It is ready for use as early as the popular Burpee's Bush Lima, but the beans are much plumper and remain green much longer. The shelled beans are very fat, are closely packed in the pods, which shell very easily. Pods are borne in clusters of from 4 to 6, averaging 4 to 5 inches long and contain usually 4 tender beans of a delightful flavor. 40c per lb.; \$32.00 per 100 lb.

**Burpee's Bush Lima.** The only bush form of the true, luscious, large Lima. It is pronounced by all good judges as unquestionably the real Bush Lima. The bushes grow eighteen to twenty inches high, of stout growth and always erect. It is an immense yielder. 30 cts. per lb.; \$28.00 per 100 lb.

## Pole or Running Beans

**Early Jersey Lima.** 10 days earlier than any other Lima. Recommended as a most profitable Lima Bean. 30 cts. lb.; \$28.00 per 100 lb.

**King of the Garden Lima.** The old standard market and family sort. The vine begins to produce pods at the foot of the pole, and the bearing season continues until frost. Pods large, and well filled with beans of mammoth size. 30 cts. per lb.; \$28.00 per 100 lb.

**BEANS—Continued**

**Early Golden Cluster Wax.** The finest of all the wax podded pole beans. It bears profusely its large, flat, golden yellow pods in clusters of three to six from bottom to top of pole, and continues in bearing long. Seed white. 30 cts. per lb.; \$28.00 per 100 lb.

**Old Homestead or Kentucky Wonder.** An excellent green podded variety; enormously productive, the long pods hanging in great clusters along the entire vine. Seed dark brown. 30 cts. per lb.; \$28.00 per 100 lb.

**Lazy Wife.** One of the most productive and easily gathered of the Pole Beans, hence its very dis-courteous name. A most excellent bean for the home garden. 35 cts. per lb.; \$32.00 per 100 lb.

**Dutch Case Knife.** Very early and prolific, with long, flat, irregularly shaped pods. A favorite for pickling. 30 cts. per lb.; \$28.00 per 100 lb.

**Scarlet Runner.** Vines very ornamental with dazzling scarlet flowers; beans large, of best flavor and quality. 40 cts. per lb.

**Field Sorts**

**Dwarf White Navy.** A sure cropper; very prolific. 25 cts. per lb.; \$20.00 per 100 lb.

**White Kidney.** A superior variety for baking; beans kidney shaped. 25 cts. per lb.; \$20.00 per 100 lb.

**White Marrow.** Very prolific; beans large, clear, white. 25 cts. per lb.; \$20.00 per 100 lb.

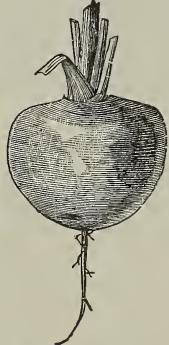
**Red Kidney.** The old-fashioned baking bean. 25 cts. per lb.; \$20.00 per 100 lb.

**BEETS**

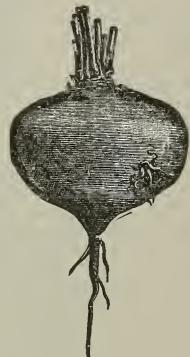
Culture. Fibrous loam, well drained and well enriched, will raise good Beet crop. For early table Beets, have drills 16 to 20 inches apart, and sow the seed about 1 inch deep, as early as the ground can be put in good shape, or seed may be sown under glass four weeks sooner, and the young seedlings transplanted to open ground, to give an extra early crop. Give thorough and clean cultivation, and thin the plants to stand 3 to 4 inches in the row. For succession sow at intervals to middle of July. For earliest sowings a light dressing of nitrate of soda, say 100 pounds per acre, will sometimes work wonders.

**Crosby's Improved Extra Early Egyptian Beet.** An improvement on Extra Early Egyptian, being as early, but of more desirable shape, color and quality. It is very sweet and tender; a most valuable sort for early market, as it is ready before any other Beet of equal quality. Oz., 15 cts.;  $\frac{1}{4}$  lb., 35 cts.; 1 lb., \$1.00.

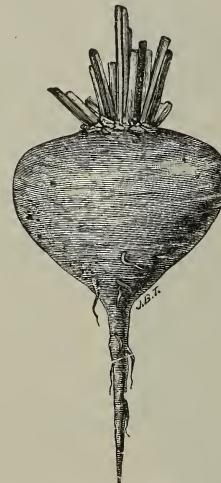
**Extra Early Dark Red Flat Egyptian Beet.** The Egyptian Beet is one of the most popular varieties among market gardeners for forcing purposes. Justly or unjustly it is considered to be the earliest of all. It certainly will bear close planting in the valuable space under glass or in a warm garden in early Spring. It is turnip-shaped, and when young is crisp and tender. In color it is dark red. To gardeners having a preference for Egyptian we offer the best strain of seed now on the market. Oz., 15 cts.;  $\frac{1}{4}$  lb., 35 cts.; 1 lb., \$1.00.



Early Eclipse



Edmonds Improved



Bastian's Early

**Extra Early Eclipse.** Remarkable for its very rapid growth, the perfection of its form—which is globular—of its beautiful crimson flesh, and for its dwarf foliage. Roots are bright glossy red. Oz., 15 cts.;  $\frac{1}{4}$  lb., 35 cts.; 1 lb., \$1.00.

**Detroit Dark Red Beet.** A splendid beet of a dark red color, for home or market. By far the best for canning, on account of its beauty. Small, upright tops and perfectly small roots. Flesh zoned with lighter and darker bands; tender and sweet. Oz., 15 cts.;  $\frac{1}{4}$  lb., 40 cts.; 1 lb., \$1.25.

**BEETS—Continued**

**Swiss Chard, or Sea Kale Beet.** A distinct vegetable, used for greens or pickles. Oz., 15 cts.;  $\frac{1}{4}$  lb., 40 cts.; 1 lb., \$1.25.

**Sugar Beets****For Stock Feeding**

**Culture.** Sow and cultivate same as Mangel except that they should be thinned out 6 to 8 inches in the row.

**Per Packet, any variety, 5 cents**

**Giant Half Sugar.** This unites the large size of the mangel with the greater feeding value of the sugar beet. The roots average 10 to 12 inches, and the outline is that of a broad thick wedge. The upper portion is of a soft bright pink, shading lighter toward the bottom where the lower portion for about one-third of the length is white.  $\frac{1}{4}$  lb., 25 cts.; 1 lb., 80 cts.

**Klein Wanzleben Sugar.** More widely grown than any other; without question the best sort for general cultivation. Grows below the surface, producing a fine, shapely root; the richest in saccharine matter.  $\frac{1}{4}$  lb., 25 cts.; 1 lb., 80 cts.

**White French—Red Top Sugar.** A most desirable variety for feeding stock; hardy and productive. Roots egg-shaped, tinged with red at top.  $\frac{1}{4}$  lb., 25 cts.; 1 lb., 80 cts.

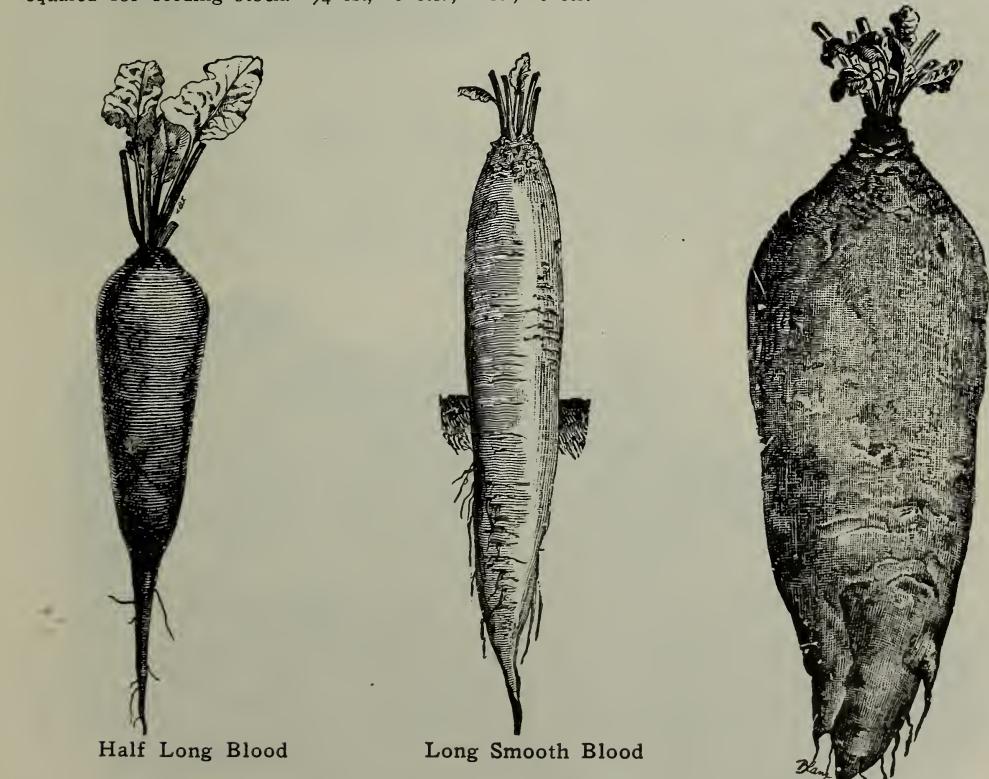
**MANGEL WURZEL**

**Culture.** Sow 5 pounds to the acre in April or June, in rows 3 feet apart, and thin to 9 inches in the row. Cultivate frequently with horse tools and you will have an abundant crop for Winter use.

**Per Packet, any variety, 5 cents**

**Botzum's Improved Mammoth Long Red.** The largest and most productive variety. Immense crops can be grown from it.  $\frac{1}{4}$  lb., 25 cts.; 1 lb., 80 cts.

**Golden Tankard.** Shape cylindrical, color deep rich yellow, flesh yellow circled with white. Unequaled for feeding stock.  $\frac{1}{4}$  lb., 25 cts.; 1 lb., 80 cts.



Half Long Blood

Long Smooth Blood

Mammoth Long Red

**CABBAGE**  
**Extra Early Cabbage**

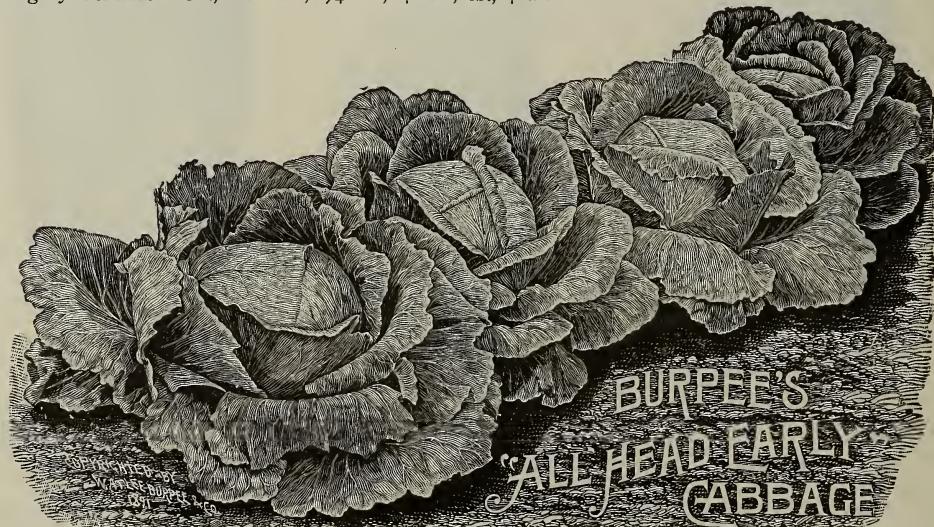
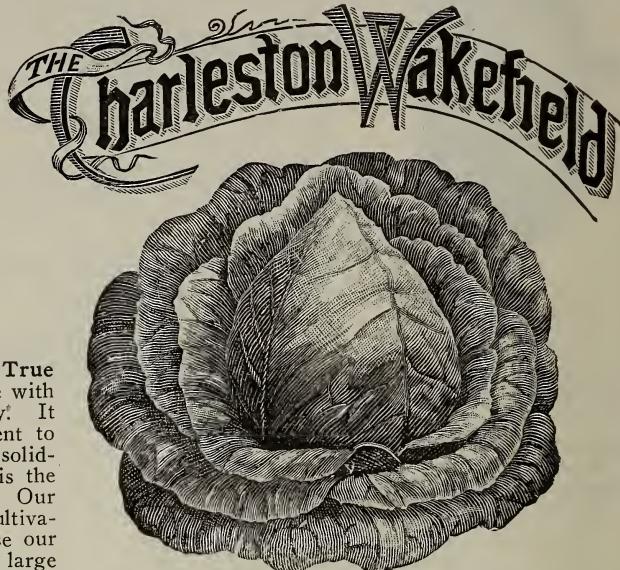
**Culture.** Soil for Cabbage should be rich and heavy loam, with good drainage. On such a soil, with an abundance of stable manure, excellent crops are sure to be grown. For early Spring sow in Fall, not too early, or the plants are liable to bolt in the Spring, instead of heading. In a month the plants will be fit to transplant to cold frames where they are wintered, taking care in planting to set the young plants down to the first leaves. Transplant in Spring as soon as the ground can be worked, setting the plants 2 feet apart one way and from 12 to 18 inches the other, according to the variety. For late or Winter crops, the seed is sown in May, and the plants set out in July. In this case they are set in rows 2 by 3 feet, so as to work them with a horse and cultivator.



Early Jersey Wakefield

**Early Jersey Wakefield Cabbage. True Type.** The most popular early Cabbage with market gardeners all over the country! It is grown in vast quantities for shipment to Northern cities. Unequalled for size, solidity, earliness, uniformity and trueness, is the universal verdict of Cabbage growers. Our stock of Wakefield is the earliest in cultivation. Every Cabbage grower should use our Wakefield. Our seed is ordered by large Cabbage growers long in advance of the time of sowing seed in order to secure our fine stock, which has never failed to produce satisfactory crops. Oz., 40 cts.;  $\frac{1}{4}$  lb., \$1.50; lb., \$4.75.

**The Charleston or Large Wakefield. The Best Large Early Cabbage.** This Cabbage has created a sensation with the Cabbage growers all over the country on account of the decided advantage it has over all other sorts. It can be the FIRST variety SENT TO MARKET, and on account of its handsome appearance will invariably bring the tip-top prices. If, however, the early market prices are low, it can be safely left standing in the field to mature to an extra large, compact, solid, magnificent Cabbage, which has never failed to attract the admiration of the most skilled gardeners, and always brings better prices than any other sort harvested at the same time. Our stock is thoroughly reliable. Oz., 40 cts.;  $\frac{1}{4}$  lb., \$1.50; lb., \$4.75.



ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

### CABBAGE

**Early Winnigstadt—The Prussian Prize Stock.** The popularity of Winnigstadt Cabbage in all sections of the world is proverbial, but there is a great difference in the quality of the stocks. Some will produce heads of twice the size of others; the finest is grown in Northern Prussia. It is from this section that our famous stock was introduced a few years ago. It has become very popular with our market gardeners. Oz., 40 cts.;  $\frac{1}{4}$  lb., \$1.50; lb., \$4.75.

**"Copenhagen Market," New Early English Danish Cabbage.** As early as Charleston Wakefield. This new Cabbage is very heavy and solid, like the Danish, "Ball Head" type of Cabbage; makes a fine, large, globe-shaped head with well-developed outside leaves, but is very much earlier in maturing than any of the Danish Cabbages, and makes a very fine second-early variety, coming in about two weeks later than the "Early Jersey Wakefield." The heads weigh 14 to 16 pounds each. The seed is very scarce this year. Oz., 50 cts.;  $\frac{1}{4}$  lb., \$1.75; lb., \$6.00.

**Enkhuizen Glory.** Is a valuable, early variety. It produces fine, marketable heads and is a splendid sort for the private garden and market gardener who grows for high-class trade. The heads are very solid with but few outer leaves and of such compact growth as to permit close planting. The quality is excellent. Oz., 50 cts.;  $\frac{1}{4}$  lb., \$1.75; lb., \$6.00.

### Second Early Varieties

**All Head Early Cabbage.** For uniformity, reliability of heading, size, earliness and quality it is very superior. Its heads grow compact and free from spreading leaves. Oz., 40 cts.;  $\frac{1}{4}$  lb., \$1.50; lb., \$4.75.

**Henderson's Early Summer Cabbage.** In size, form, solidity and earliness this is truly a model Cabbage. It heads just after our Jersey Wakefield. Oz., 40 cts.;  $\frac{1}{4}$  lb., \$1.50; lb., \$4.75.

**Henderson's Early Succession Cabbage.** A wonderful Cabbage for solidity, productiveness and fine, large heads. Matures early, has handsome color and fine quality. Oz., 40 cts.;  $\frac{1}{4}$  lb., 175; lb., \$4.75.

**Sure Head Cabbage.** True American grown. Produces large, round, flattened heads that are all head, with fewer outer leaves, very uniform, firm and weighs from 10 to 15 pounds each. Splendid shipper and of an excellent quality. Oz., 40 cts.;  $\frac{1}{4}$  lb., \$1.50; lb., \$4.75.

**All Seasons.** An "all-season" variety, equally good for Fall and Winter as for Summer use. The heads are large, solid, round, flattened on top, and of best quality. Oz., 40 cts.;  $\frac{1}{4}$  lb., \$1.50; lb., \$4.75.

### Late or Winter Cabbage

**Extra Large, Late, Flat Dutch; Market Gardener's Choicest Stock.** Can be planted later than the old-time varieties and matures more quickly into a handsome, EXTRA LARGE, solid, uniform Cabbage of perfect keeping qualities. It has of its own superior merits become a great favorite everywhere. Oz., 40 cts.;  $\frac{1}{4}$  lb., \$1.50; lb., \$4.75.

**Premium Flat Dutch.** It has long been the favorite sort for cold slaw and sauerkraut. It matures just before severe frost and keeps perfectly over Winter. Oz., 40 cts.;  $\frac{1}{4}$  lb., \$1.50; lb., \$4.75.

**Large, Late, Drumhead Cabbage.** This splendid Cabbage produces enormous heads. Its good keeping quality makes it a first-class sort to carry over Winter for long distance shipping. Oz., 40 cts.;  $\frac{1}{4}$  lb., \$1.50; lb., \$4.75.

**Danish Ball Head Cabbage.** This is the most excellent Cabbage, is very solid and outweighs any other Cabbage of equal size. The head is round with flattened top; a good keeper; first-class shipper and sells everywhere. Oz., 50 cts.;  $\frac{1}{4}$  lb., \$1.75; lb., \$6.00.

### Red Cabbage



Mammoth Rock Red

**Mammoth Rock Red.** The largest heading of any red sort. Heads are large, of deep-red color, quality excellent. Oz., 50 cts.;  $\frac{1}{4}$  lb., \$1.75; lb., \$6.00.

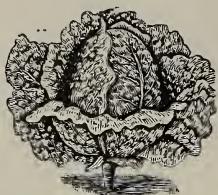
**Red Drumhead.** The standard pickling variety. A good keeper. Oz., 50 cts.;  $\frac{1}{4}$  lb., \$1.75; 1 lb., \$6.00.

### Savoy Cabbage

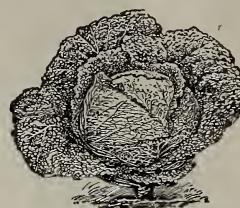
**Extra Early Drumhead Savoy.** A very early and superior dwarf variety of fine quality. Oz., 40 cts.;  $\frac{1}{4}$  lb., \$1.50; lb., \$4.75.

**CABBAGE—Continued**

**Green Curled Savoy.** Loose heads; hardy; second early. Oz., 40 cts.;  $\frac{1}{4}$  lb., \$1.50; lb., \$4.75.



Green Curled Savoy



Drumhead Savoy

**Drumhead Savoy.** None of the late-growing varieties can begin to equal in flavor this sort for family use; heads large, solid and a splendid keeper. Oz., 40 cts.;  $\frac{1}{4}$  lb., \$1.50; lb., \$4.75.

**Pe-Tsai Chinese or Celery Cabbage.** Improved Chinese Cabbage. This vegetable is new to the public although old to the Horticulturists. Plant in July. Sow drills 16 to 20 inches apart and the seedlings thinned two or three times. Profitable both as a shipping and market Cabbage. Oz., 50 cts.;  $\frac{1}{4}$  lb., \$1.75; lb., \$6.00.

**CABBAGE PLANTS.** Ready from April 15th until June. Every order given careful attention.

**BROCCOLI**

Nearly allied to the cauliflower, but more hardy. The seed should be sown in this district in the early part of May, and transplanted in June; further south the sowing should be delayed until June or July, and the transplanting accordingly from August to October. In parts of the country where the thermometer does not fall below 20 or 25 degrees Broccoli may be had in perfection from November until March. It succeeds best in a moist and rather cold atmosphere.

**Large Early White** (150 days). Large white head, resembling Cauliflower. We offer an especially fine strain of Early White Broccoli, and strongly recommend its more general culture. Oz., 50 cts.; lb., \$6.00.

**White Cape.** Heads medium size, close, compact, and of creamy white color. One of the most certain to head. Oz., 50 cts.; lb., \$6.00.

**Purple Cape.** Differs only in color. Oz., 60 cts.; lb., \$7.00.

**BRUSSELS SPROUTS**

Brussels Sprouts are highly valued in all European countries, but are not generally appreciated here. Thousands and thousands of native born Americans have never tried them and do not know what palatable and nutritious vegetables they are. They should be in every garden.

Culture same as for early or late cabbage, depending on whether an early or late crop is desired, with the exception that the seed should be sown a few days earlier and when the plants are planted out they should be set 15 inches apart in rows 2 feet apart. One ounce will sow 200 feet of drills.

**Improved Dwarf.** The stem which usually grows from 20 inches to 2 feet in height, is covered with "miniature cabbages" which may be boiled like cabbage or cooked in cream like cauliflower. They are by all means the most delicious and delicately flavored of the cabbage family. On this variety the heads grow very closely and its quality is the finest. Oz., 35 cts.; lb., \$3.50.

**CAULIFLOWER**

One oz. for 1,000 plants

**Culture.** The most delicate and delightful vegetable, like the cabbage, requires an exceptionally rich soil cultivated deeply and fertilized thoroughly with well rotted compost.

For Spring and Summer crops, Fall sowings may be wintered over in cold frames, or seed of early varieties may be sown in hot-beds in winter (as for early cabbages), transplanting in either case to open ground in Spring, according to climate and season, cultivating thoroughly thereafter as for cabbages. For late autumn crops, sow varieties after danger of frost is over, transplanting and treating thereafter as winter cabbages.

**Selected Early Snowball.** Easiest grown, surest header. It is of very dwarf, erect habit, with short, outer leaves. Can be planted less than 2 feet apart each way. It is a sure header, every plant forming large, solid, perfect head of the finest table quality.  $\frac{1}{4}$  oz., 85 cts.; oz., \$2.50;  $\frac{1}{4}$  lb., \$8.00.

**Extra-Early Dwarf Erfurt.** This Cauliflower is an extra-early sort, of dwarf habit, and desirable for forcing or planting in the open ground.  $\frac{1}{4}$  oz., 85 cts.; oz., \$2.50;  $\frac{1}{4}$  lb., \$8.00.

**Danish Dry Weather.** A variety that is recommended for midsummer use because it will stand more draught and heat than any sort. The heads are very large, snowy white, being well protected by large, outer leaves; sure header.  $\frac{1}{4}$  oz., 85 cts.; oz., \$2.50;  $\frac{1}{4}$  lb., \$8.00.

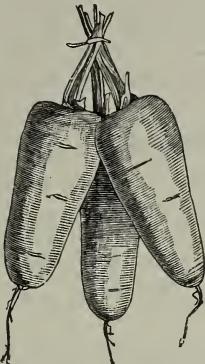
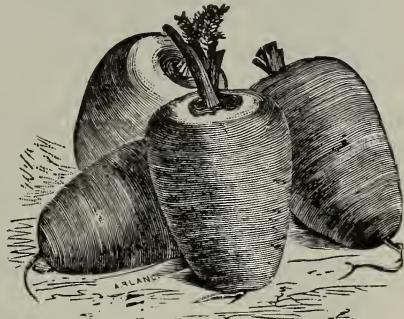
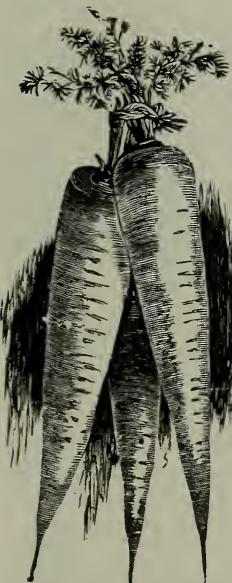


Early Snowball

**Veitches Autumn Giant.** Of vigorous growth; very large white heads; late. Oz., 60 cts.;  $\frac{1}{4}$  lb., \$1.50.

**CARROT**

One ounce 100 ft. drilled 3 lb. per acre

**Danvers Half Long****Chantenay****Ox Heart****Improved Long Orange****Per Packet, any variety, 5 cents**

**Early Scarlet Horn.** (Stump Root.) One of the best early forcing varieties, this being used mostly for forcing and extra early planting. It is very fine, green and excellent flavor as a Table Carrot. Grows well in shallow soil, being a short variety with small top. The market gardener's favorite for extra early. Oz., 10 cts.;  $\frac{1}{4}$  lb., 30 cts.; lb., \$1.00.

**Chantenay, Half Long.** Medium early, roots smooth, bright orange and of fine quality. An excellent market sort. Oz., 10 cts.;  $\frac{1}{4}$  lb., 30 cts.; lb., \$1.00.

**Danvers Half Long**

A handsome, half-long, cylindrical, stump-rooted Carrot of good size and of a rich, dark orange color; it grows to a large size, is smooth, and the flesh is very close in texture, with very little core and a small, tapering tap-root. It is a first-class Carrot for all soils; under good cultivation it has yielded 25 to 30 tons per acre, with the smallest length of root of any now grown, and is more easily harvested than the longer types. Our selected stock gives the best of satisfaction.

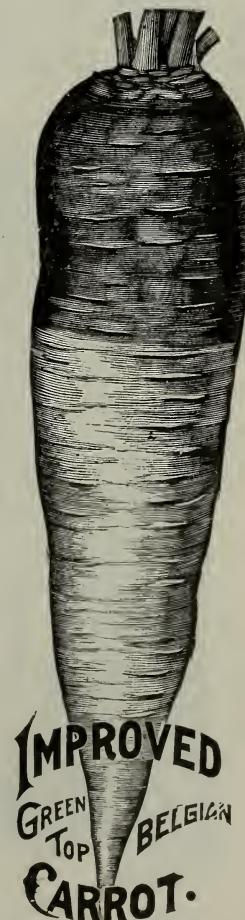
Oz., 15 cts.;  $\frac{1}{4}$  lb., 40 cts.; lb., \$1.25.

**Nantes Half Long.** The sweetest of all Carrots. Roots are smooth, almost cylindrical and grow about 6 inches long. The flesh is bright orange becoming yellow in the center but without any distinct core; sweet and sugary; not apt to crack open while growing. An excellent table sort and a heavy cropper. Oz., 15 cts.;  $\frac{1}{4}$  lb., 40 cts.; lb., \$1.25.

**Guerande, or Oxheart.** Roots are broad at the top, germinating abruptly in a small tap root. On account of their shape they are easily dug. Flesh is a bright orange, fine grain and very sweet. Oz., 10 cts.;  $\frac{1}{4}$  lb., 30 cts.; lb., \$1.00.

**Long Orange.** A well known standard sort. Roots long, thickest near the crown, tapering regularly to a point; color deep orange. Oz., 10 cts.;  $\frac{1}{4}$  lb., 30 cts.; lb., \$1.00.

**Large White Belgian.** The lower part of the root is white; that growing and exposed above ground, green. It is exclusively grown for stock. Oz., 10 cts.;  $\frac{1}{4}$  lb., 25 cts.; lb., 75 cts.

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## CHICORY

**Witloof, or French Endive.** Seed is sown in drills in the open ground in rows 12 to 18 inches apart, thinning out the plants when up about 2 inches above the ground. In the fall the roots, which resemble parsnips, are lifted, the top foliage cut off and the bottom of the root to within 8 inches of the top. These are placed in sand in a cellar, upright, about 2 inches apart, and forced, the growth somewhat resembling Cos lettuce, which is considered a splendid winter salad. Oz., 35 cts.;  $\frac{1}{4}$  lb., \$1.15; lb., \$4.00.

## CHERVIL

**Double, or Moss Curled.** Few market-gardeners realize that they can have a steady income during the winter from supplying fresh greens to the hotel trade. Chervil is a flavoring green which is used in dressing lettuce, and, while it is but little known, a single introduction will work up a considerable demand. By sowing it in the autumn in hotbeds it can be cut during the whole winter if the sash is protected during severe weather. Oz., 20 cts.;  $\frac{1}{4}$  lb., 60 cts.; lb., \$2.00.

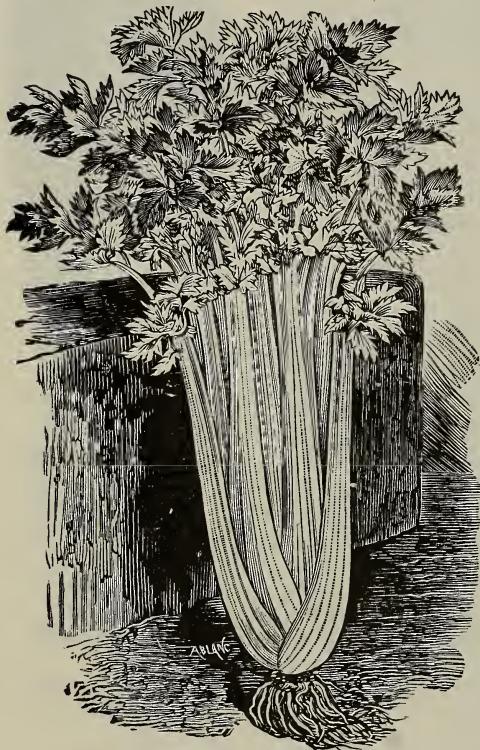
## CORN SALAD OR FETTICUS

Per Packet, 5 cents.

**Large Seeded Broad Leaf.** Leaves large and broad. The best sort.  $\frac{1}{4}$  lb., 40 cts.; lb., \$1.25.

## CELERY

**Culture.** One ounce will produce about twenty-five hundred plants and sow about two hundred feet of row. Sow the last of March or early in April, in open border, in rich, mellow ground in shallow drills, watering freely in dry weather. By rolling or pressing in the seed, the result will be more satisfactory than when only covered. Cut the tops off once or twice before planting out, and make them stocky. When the plants are 5 or 6 inches high, transplant the dwarf varieties 3 feet and the taller sort 4 feet between the rows; plant 6 inches apart in the rows. Cultivate well and when large enough, blanch by earthing up. The first operation is that of "handling," generally done by the beginning of September. After the soil has been drawn up with the hose, it is drawn around each plant by hand to keep the leaves firm in upright position and prevent spreading. When plants have become "set" in an upright position and the Celery is wanted for early use, they should be "banked." This is done by throwing the soil up as close to the plants as possible with a plow and finishing it with a spade, bringing the earth nearly up to the tops of the plants. The method employed now for protecting it is by covering the tops of the banks with waterproof felt paper.



**Columbia.** A recent introduction. Plant medium height, with thick ribs and quite well hearted. In season it is quite early and the quality is unsurpassed. Oz., 50 cts.; 2 ozs., \$1.00;  $\frac{1}{4}$  lb., \$2.00; lb., \$6.00

**Giant Pascal.** Is of a fine nutty flavor, being entirely free from any bitter taste. It grows about 2 feet high; the stalks are very broad, thick and crisp, and entirely stringless. Oz., 25 cts.;  $\frac{1}{4}$  lb., 75 cts.; lb., \$2.75.

**Golden Self-Blanching.** The finest celery for early use; of compact growth, solid, good size, rich golden yellow color; blanches readily. Our stock is unexcelled; absolutely reliable; grown from the originator's stock in France, and is all of 1919 crop. Owing to the short crop of the past season, prices for genuine stock are higher than usual. Oz., \$1.50;  $\frac{1}{4}$  lb., \$5.00; lb., \$16.00.

### Easy Blanching Celery

One of the most valuable introductions of the past few years. It excels in quality, ease of blanching and also long keeping qualities. Pkg., 10 cts.; oz. \$1.25;  $\frac{1}{4}$  lb., \$4.00; lb., \$15.00.

### SWEET OR SUGAR CORN

We supply packages of Sweet Corn at 10 cts. each. One Quart will plant 20 Hills; 8 to 10 Quarts for an Acre in Hills

Culture. Seed of the sweetest varieties is liable to rot if planted in wet or cold ground. Yet if we have an early warm spell in Spring, it may pay us to take some risks. Often the plants, when once up, will escape injury by a belated light frost. Plant in warm soil 5 or 6 kernels to a hill, making rows 3 feet apart for the dwarf or early sorts and 4 feet apart for the taller late sorts. Hill to be 2 to 3 feet apart in the rows, thin out to three plants in a hill. Hoe often and draw soil up to the stem, break off side shoots.

#### Extra Early Varieties

**Golden Bantam.** A variety of great merit. It is yellow in color but very sweet, ears are small, well filled out at ends. A very valuable variety for the home garden for first crop. Per lb., 25 cts.; 100 lbs., \$20.00.

**Cory White Cob.** Similar to the above, with white kernels. Per lb., 25 cts.; 100 lbs., \$20.00.

**Cory, Mammoth White Cob.** A larger ear than the preceding variety. Per lb., 25 cts.; per 100 lbs., \$20.00.

**Peep o'Day Sweet Corn.** This new variety is claimed to be the Earliest Sweet Corn. It is of Minnesota origin and has been offered in the market from 5 to 7 days earlier than any other well-known kind in the trade. Ears 5 inches long. Per lb., 25 cts.; 100 lbs., \$20.00.

**Premo.** It is a "60-day" sweet corn. It not only combines all the merits of the leading early varieties, but it is also really superior to them all in size, quality and yield. Per lb., 25 cts.; 100 lbs., \$20.00.

#### Medium Early Varieties

**Kendall's Early Giant.** Ears large, having 10 to 12 rows, pure white, sweet, tender, and very prolific; matures as early if not earlier than any of the second earlies. A very popular variety. Per lb., 25 cts.; 100 lbs., \$20.00.

**Howling Mob.** One of the earliest large varieties, being only 4 to 5 days later than White Cob Cory. The ears are 7 to 9 inches long, 12 and 14 rowed. It generally produces 2 fine ears to a stalk. Per lb., 25 cts.; 100 lbs., \$20.00.

**Early Minnesota.** Plant semi-dwarf. An excellent market variety; a little later than the preceding. Per lb., 25 cts.; 100 lbs., \$20.00.

**Crosby's Early.** This improved variety follows the Extra Early varieties of Sugar for the table and stands today as one of the most valuable and popular varieties for an early crop; it is of dwarf habit, produces medium-sized ears which have from ten to twelve rows; very productive and of luscious quality; cannot recommend it too highly. 25 cts. per lb.; \$20.00 per 100 lbs.

#### Late Varieties

Per Packet, any variety, 5 cents

**Early Evergreen.** This early strain of evergreen resembles the Stowell's in every particular, only about ten days earlier. Per lb., 25 cts.; 100 lbs., \$20.00.

**Stowell's Evergreen.** This standard main crop variety excels all other late sorts in sweetness and productiveness. It is more popular than any other for canning, for marketing and for the home garden. Great care has to be exercised in the selection of stock to grow seed from, as this variety has a tendency to deterioration and a shorter grain, which makes it less sugary and desirable. Per lb., 25 cts.; 100 lbs., \$18.00.

**Black Mexican.** The grain when dry is black. In an edible state it is white and is without question the sweetest of all the early varieties. We consider it one of the best for family use. Grows a good fodder and a large ear. Per lb., 35 cts.; 100 lbs., \$30.00.

**Mammoth Late.** A large-eared variety following Stowell's in maturity. Produces mammoth ears which are thick through, with many rows of large broad grains of excellent quality. Per lb., 25 cts.; 100 lbs., \$20.00.

**Country Gentleman or Shoe Peg.** After Stowell's, this is the best of the late corns. The ears are large and well filled with irregular grains, which are very deep and of a sugary flavor. This is a very prolific variety, 2 to 3 ears frequently on one stalk. A very popular sort for hotel trade and fancy grocers, as well as for home use. Per lb., 35 cts.; 100 lbs., \$30.00.

**Golden Cream Sweet Corn.** This new corn is bred from the Country Gentleman and Golden Bantam; the grains are long and pointed, cob slender about the size of the Golden Bantam; it combines the sweet juicy flavor of both, the ears are ready for use at a very early season, the quality is exceptionally fine being remarkably sweet and tender, a distinct sort and possesses genuine merit. 35 cts. per lb.; 100 lbs., \$30.00.

Cory



Early Minnesota



Crosby's Early



Golden Bantam



Howling Mob



Stowell's Evergreen



Mammoth



### CELERIAC

Per Packet, 5 cents

**Large Smooth Prague.** Roots large, smooth, almost round. Oz., 20 cts.;  $\frac{1}{4}$  lb., 70 cts.; lb., \$2.50.

**Turnip Rooted.** Turnip-shaped roots, with more side roots than above sort. Oz., 20 cts.; 2 ozs., 35 cts.;  $\frac{1}{4}$  lb., 70 cts.; lb., \$2.50.



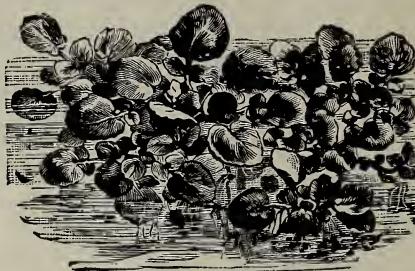
Large Smooth Prague  
Celeriac

### CRESS OR PEPPER GRASS

**Extra Curled.** Extensively used as a small salad with lettuce. The leaves while young have a warm pungent taste. Sow rather thick in shallow drills, and at short intervals during the season. Oz., 10 cts.;  $\frac{1}{4}$  lb., 30 cts.; lb., \$1.00.



Early Curled Cress



Water Cress

### CRESS—WATER

Hardy perennial aquatic plant, growing along streams and ponds. Sow the seed at the edge of the water, covering lightly. May also be sown in tubs. Oz., 45 cts.;  $\frac{1}{4}$  lb., \$1.35; lb., \$5.00.

### KOHL RABI

Per Packet, any variety, 5 cents

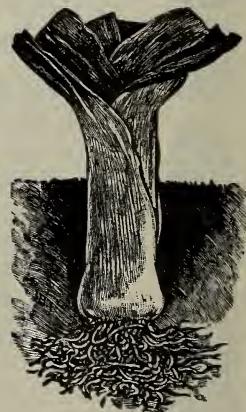
**Early White Vienna.** Very early; small white bulb. Oz., 20 cts.;  $\frac{1}{4}$  lb., 75 cts.; lb., \$2.50.

**Early Purple Vienna.** Bright purple, with leaf stems tinted with purple. Oz., 20 cts.;  $\frac{1}{4}$  lb., 75 cts.; lb., \$2.50.

**Large Green.** Hardy, late; used for feeding stock; very large bulb. Oz., 20 cts.;  $\frac{1}{4}$  lb., 75 cts.; lb., \$2.50.



Early White Vienna  
Kohl Rabi



Large Flag Leek

### LEEK

Per Packet, 5 cents

**Culture.** Sow early in April in drills 1 foot apart and 1 inch deep. When plants are 6 to 8 inches high transplant in a deep, rich soil in rows 12 inches apart and 6 inches in the rows as deep as possible, so that the neck may be covered and blanched; draw the earth to them as they grow.

**Large Flag.** Hardy and of good quality. Used more than any other kind. Oz., 35 cts.;  $\frac{1}{4}$  lb., 90 cts.; lb., \$3.00.

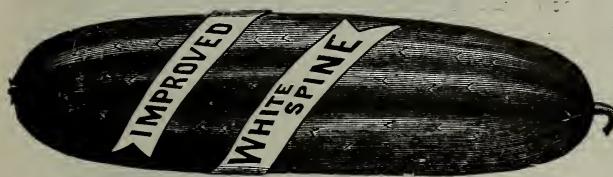
## CUCUMBER

One ounce will plant fifty hills, two pounds will plant one acre

**Culture.** For very early, sow in hotbeds upon pieces of sod, or in small pots; they can be readily transplanted with a gain of about six weeks before they can be sown in the open. Plant out in rich soil when danger of frost is over, or protect by hand glasses; or by paper held down at the corners with earth. For general crops sow in the open as soon as the weather is settled and warm, and every two weeks for a succession. For pickles sow from middle of June to Fourth of July. Sod land, turned over in the Fall, is the best for them. Plant in hills 4 feet apart, putting shovelful of well rotted manure in each hill.

**Improved White Spine.** The very best market sort; very productive; largely used for pickles. Oz., 10 cts.;  $\frac{1}{4}$  lb., 30 cts.; 1b., \$1.00.

**Davis Perfect.** A carefully selected strain of Extra Long White Spine, suitable for both greenhouse and outdoor culture. The fruits are of large size, splendid quality and fine color. The flesh is tender, brittle and of excellent flavor. A favorite for market use. Oz., 15 cts.;  $\frac{1}{4}$  lb., 35 cts.; 1b., \$1.25.

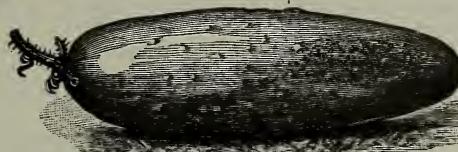


**Klondyke.** This is an extra choice strain of the White Spine type, with very dark green skin. They are large, uniform in size and attractive in appearance. Oz., 10 cts.;  $\frac{1}{4}$  lb., 30 cts.; 1b., \$1.00.

**Jersey Pickling.** One of the best for pickles; uniform in size. Oz., 10 cts.;  $\frac{1}{4}$  lb., 30 cts.; 1b., \$1.00.

**Boston Pickling or Green Prolific.** Fruit short, bright green, very productive. Oz., 10 cts.,  $\frac{1}{4}$  lb., 30 cts.; 1b., \$1.00.

**Improved Long Green.** Fruit long; when young one of the best for pickles, and when ripe is the best for sweet pickles. Oz., 15 cts.;  $\frac{1}{4}$  lb., 35 cts.; 1b., \$1.25.



Jersey Pickling Cucumber

**Early Frame or Short Green.** Follows the White Spine in earliness; it is not so desirable a variety, and is cultivated to a limited extent; is of a deep green color, and changes to a bright yellow when ripening. Oz., 10 cts.;  $\frac{1}{4}$  lb., 30 cts.; 1b., \$1.00.

**Early Green Cluster.** Is quite early and very productive; medium size and of a pale green color, turning to a brownish yellow when ripe. Produces the fruits in clusters, good quality and flavor. Oz., 10 cts.;  $\frac{1}{4}$  lb., 30 cts.; 1b., \$1.00.

**Japanese Climbing.** Vines vigorous and of climbing habit. Very prolific; fruit 10 to 12 inches long, dark green; good for pickling or slicing. Oz., 25 cts.;  $\frac{1}{4}$  lb., 60 cts.; 1b., \$2.00.

**Ke!ways Ex. Select and Imp. Telegraph.** For forcing; the most prolific sort. Our stock is true. Per small pkt. (15 seeds), 25 cts.; per pkt. (100 seeds), \$1.50.

## DANDELION

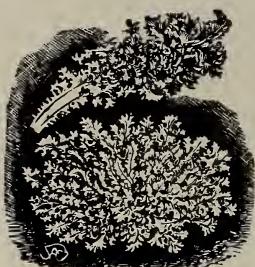
Per Packet, 5 cents

**Improved Thick Leaved.** Less bitter than the common Dandelion; a great improvement in size, thickness and fine flavor. Oz., 65 cts.;  $\frac{1}{2}$  lb., \$2.25; 1b., \$8.00.

**ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE**

**ENDIVE**

Per Packet, any variety, 5 cents



White Curled



Green Curled



Broad Leaved Batavian

**White Curled.** The most beautiful and attractive; leaves almost white. Oz., 20 cts.;  $\frac{1}{4}$  lb., 60 cts.; lb., \$1.75.

**Green Curled.** Hardy; beautiful curled dark leaves; blanches white. Oz., 20 cts.;  $\frac{1}{4}$  lb., 60 cts.; lb., \$1.75.

**Broad Leaved Batavian.** Has broad, thick, plain leaves, which form a large head. Oz., 25 cts.;  $\frac{1}{4}$  lb., 65 cts.; lb., \$2.00.

**EGG PLANT**

Per Packet, 5 cents

**New York Improved Purple.** The leading market variety; large, round, dark purple, thornless; most productive of any. Oz., 50 cts.;  $\frac{1}{4}$  lb., \$1.75; lb., \$6.00.

**Black Beauty.** This is the earliest large fruited variety. The fruits set freely and develop quickly so the entire crop can be harvested before frost. Oz., 60 cts.;  $\frac{1}{4}$  lb., \$2.00; lb., \$7.00.

**FLORENCE FENNEL**

An excellent legume with agreeable aromatic flavor, somewhat resembling celery, but with sweet taste and a more delicate odor. Very distinct from Common Fennel. The base of the leaf-stalks of this variety is much thickened and bulb-like. It is grown like Celery. Oz., 25 cts.;  $\frac{1}{4}$  lb., 75 cts.; lb., \$2.00.



New York Improved Purple

**KALE OR BORECOLE**

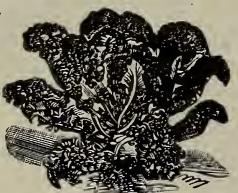
One ounce will produce about 5,000 plants

**Culture.** The Kales are more hardy than Cabbage, make excellent greens for Winter and Spring use, and are improved by frost. Sow from May to June and cultivate the same as Cabbage. For early Spring use sow in September, and protect during Winter. Some of the varieties are so hardy that the green leaves may be dug out from under the snow in Winter and used for greens.

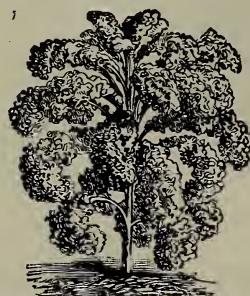
**Extra Curled German Dwarf Green.** Plant dwarf and compact. Leaves long, of deep green color. Oz., 15 cts.;  $\frac{1}{4}$  lb., 40 cts.; lb., \$1.50.

**Siberian.** Sometimes called Sprouts and German Greens. In this variety the very large green leaves are comparatively plain in the center, but coarsely cut and frilled on the edge. The start plant is low but spreading and very hardy. Oz., 15 cts.;  $\frac{1}{4}$  lb., 40 cts.; lb., \$1.50.

**Tall Green Curled Scotch.** About two feet high. Leaves dark green, curled and wrinkled. Oz., 25 cts.;  $\frac{1}{4}$  lb., 75 cts.; lb., \$2.50.



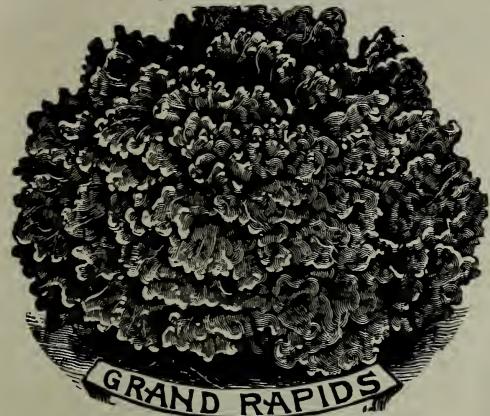
Dwarf Curled German



Tall Green Curled Scotch

## LETTUCE

A vegetable that should be grown by everyone and in everyone's garden whether large or small. It can be sown in succession every two weeks during the season. It is best, however, to sow the leaf varieties earlier in the season and the head varieties a little later in the season for Fall use. It will grow in any soil, but much better results are obtained from rich soil and it is very essential that the plants make a quick growth so the leaves will be tender. Plants can be started in beds and then transplanted to the open as early as any crop can be put out. We do not believe that our stock of Black Seeded Simpson and Grand Rapids can be beat for early forcing and especially are they desirable for greenhouse forcing. The large headed varieties, such as the Big Boston, are the finest varieties of lettuce grown. They are grown by parties who specialize in growing lettuce and who are thoroughly reliable as to quality of stock they send out. Our seed has been grown from our own seed stock and is very desirable. We think these types mentioned above are exceptionally true and uniform and we would like to have you try all of these this season. One ounce of seed will produce 2,500 to 3,000 plants; 2 to 3 pounds will seed an acre.



GRAND RAPIDS

**Grand Rapids.** An upright grower, which does not form a head, but produces large, crinkly leaves of high quality. Used more than any other variety for greenhouse forcing. Our strain will be found very uniform and fine. Forcing Stock, oz., 30 cts.;  $\frac{1}{2}$  lb., 80 cts.; lb. \$1.50. Regular Stock, oz., 20 cts.;  $\frac{1}{2}$  lb., 65 cts.; lb., \$1.25.

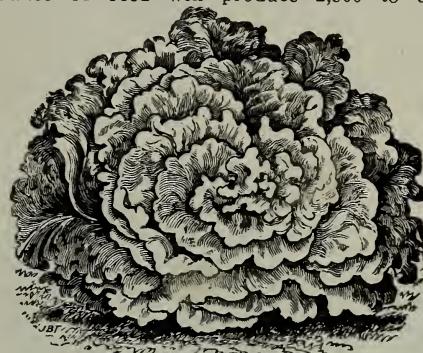
**Big Boston.** One of the most popular varieties. Heads large and very solid. The leaves are tough, which enables it to stand handling better than most sorts. One of the best for shipping long distances. While this variety does exceedingly well in the Spring and Fall, we do not recommend it for Summer, as it is apt to burn in the heart. Cold weather will also turn outer leaves red. Oz., 20 cts.;  $\frac{1}{4}$  lb., 40 cts.; lb., \$1.25.

**Early Curled Silesia.** A very early tender sort, with fine curled leaves. Oz., 20 cts.;  $\frac{1}{4}$  lb., 40 cts.; lb., \$1.25.



May King

**May King.** A handsome, extremely early, compact cabbage or heading variety, forming very firm heads of medium size and excellent quality. Color light yellowish-green, tinged with reddish brown when mature. Oz., 20 cts.;  $\frac{1}{4}$  lb., 40 cts.; lb., \$1.25.



Black Seeded Simpson

**Black Seeded Simpson.** Very largely grown by market gardeners, and one of the best varieties for any purpose. It forms a curly, loose head of good quality. Oz., 20 cts.;  $\frac{1}{4}$  lb., 40 cts.; lb., \$1.25.

**Early Curled Simpson.** An early Lettuce, forming a crinkly rosette of light green leaves. Can be sown thickly and used when quite young. Largely planted for early outdoor crop. Oz., 20 cts.;  $\frac{1}{4}$  lb., 40 cts.; lb., \$1.25.

**Prize Head.** One of the very best loose-bunching or non-heading varieties. Leaves brown, very curly and of remarkably fine flavor. Grows quickly, and all except the outer rows of leaves are very brittle. It is probably the most easily grown lettuce in cultivation. Oz., 20 cts.;  $\frac{1}{4}$  lb., 40 cts.; lb., \$1.25.

**Romain, or Cos Lettuce.** (Trianon Early White Self-Folding.) An upright, quick-growing sort, self-blanching, large, very crisp and of superior flavor. This is the best of the Cos varieties. Oz., 20 cts.;  $\frac{1}{4}$  lb., 60 cts.; lb., \$2.00.



Improved Hanson

**Improved Hanson.** This is an exceptionally fine variety, attractive in appearance, and of highest quality; good for either Spring or Summer crop. The leaves are curly and very crisp and the head is large. It also stands a long time before going to seed. Oz., 20 cts.;  $\frac{1}{4}$  lb., 40 cts.; lb., \$1.25.

## MUSKMELONS

### (Cantaloupe)

Per oz., any variety, 15 cents

One ounce will plant about 50 hills; 2 to 3 pounds in hills per acre

**Culture.** Melons thrive best in a light, rich soil. Plant early in May, when the ground has become warm and dry, in hills 5 to 6 feet apart each way for Muskmelons; 8 to 10 feet for Watermelons. Previous to sowing the seed, mix a few shovelfuls of well-rotted manure in each hill, and plant in each 12 to 15 seeds after all danger of the bugs is over, thin out to three or four plants per hill. A few hills for early use may be had by sowing on pieces of sod in a hotbed, and when warm enough transplant to open ground. Melon vines are subject to the same destructive insects and fungous foes as are Cucumber and Squash vines. Early and repeated spraying with Bordeaux Arsenate of Lead Mixture is always advisable for these crops.



Extra Early Hackensack

### Green Fleshed Varieties

All varieties, oz., 10 cts.;  $\frac{1}{4}$  lb., 30 cts.; 1 lb., \$1.00

**Rocky Ford.** The most popular market variety. An improvement on the netted gem varieties; more oblong, skin is light green and netted. Flesh is green, excellent flavor, unsurpassed for shipping.

**Hackensack Extra Early.** Very early. Fruit is large and flattened. Ribs large and of irregular width, densely covered with coarse netting. Green flesh, thick, and excellent flavor. Always in demand in this market.

**Hackensack, or Turk's Cap.** A large-fruited sort, with deep ribs, green flesh; a very old but still popular sort in many melon districts.

**Long Island Beauty.** Very similar to the Hackensack. Ripens early; fruits are large, heavily ribbed and netted. Excellent quality.

**Montreal Market Improved.** One of the largest melons grown. Fruit is nearly round, deeply and very irregularly ribbed. Skin green and densely netted; flesh remarkably thick and light green and of delicious flavor. The best melon for exhibition purposes and home use.

**Improved Large Green Nutmeg.** Very large; excellent for late.

### Red or Salmon-Fleshed

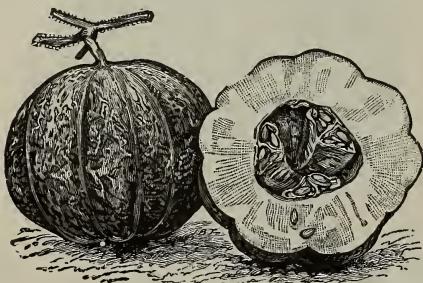
**Emerald Gem.** It is of a rich, delicious flavor and fine quality. Very early and prolific; skin is striped deep emerald green with a few light colored stripes. Flesh is very thick and salmon color. Exceedingly popular variety for market gardening or home use.

**Osage, or Miller's Cream.** Skin dark green color, slightly netted. Flesh salmon color, sweet and delicious flavor. A remarkable keeper. One of the best salmon fleshed melons for shipping.

**Petosky, or Paul Rose.** Nearly oval, slightly ribbed netted; flesh thick and orange color.

**Tip Top.** Fruit large size, nearly round, slightly ribbed and covered lightly with shallow netting. Skin cream-colored, flesh thick, deep yellow and very luscious.

**Banana.** Long banana-like fruit; skin creamy white; flesh deep salmon.



Emerald Gem

## MUSTARD

Per Packet, 5 cents

**White English.** Leaves light green, mild and tender; seed light yellow. Oz., 10 cts.;  $\frac{1}{4}$  lb., 20 cts.; 1 lb., 75 cts.

**Brown or Black.** Strong and more pungent than the white. Oz., 10 cts.;  $\frac{1}{4}$  lb., 20 cts.; 1 lb., 75 cts.

**WATER MELON**

1 oz. for 30 hills; 4 to 5 lbs. in hills for an acre

**Culture.** Watermelons require a rich though rather sandy soil for best development, and thrive best in warm latitudes, although in warm, sandy soils in this latitude fine crops are also obtained. Cultivate exactly as for Muskmelons, except that the hills should be eight feet apart.

All Water Melon, oz., 10 cts.;  $\frac{1}{4}$  lb., 25c; 1 lb., 75 cts.

**Peerless, or Ice Cream.** Fruit oval-shaped, skin bright green, finely veined or mottled. Rind thin, flesh bright scarlet, solid, crisp and very sweet.



Black Spanish Watermelon

**Black Spanish.** Round, very dark green, with scarlet flesh and black seeds; early.

**Sweet Heart.** Fruit oval shaped, skin pale green, distinctly veined with a slightly darker shade. Flesh deep and of the finest quality.

**Fordhook Early.** This is the earliest large-fruited melon. Nearly round in shape, rather short and blocky; skin dark green with an occasional lighter stripe. While the rind is thin, the skin is tough, making it a good shipper. Flesh bright red and of good quality.

**Kleckley's Sweet, or Monte Cristo.** This very popular melon is one of the best for nearby markets. Fruits are medium size, oblong, of a dark green color, and have very thin rind. Flesh bright scarlet with solid heart, crisp, sugary and melting, and entirely free from stringiness.

**Kolb's Gem.** Fruit nearly round, medium size; skin marked with irregular stripes of light and dark green. A good shipper, but of poor quality.

**Tom Watson.** A large, long melon with dark green rind and light crimson flesh of excellent quality. It is a splendid shipper and is being grown extensively in the south for northern markets.

**Mountain Sweet.** Large, oblong, dark green; flesh red, very sweet.

**Sweet Heart.** This melon is early, large, handsome, heavy and productive. The shape is oval, and color mottled light to very light green.

**Citron** (for preserving). Fruits small and round. Flesh white and solid. Not used for eating in the raw state, but for preserving, pickling, etc.

**OKRA OR GUMBO**

Per Packet, 5 cents

**White Velvet.** A great improvement over other varieties; pods larger, white, very smooth, an abundant bearer; of superior quality. 1 oz., 10 cts.;  $\frac{1}{2}$  lb., 25 cts.; 1 lb., 70 cts.



Mushrooms

**Brandywine.** Bricks, 35 cts. per.

**MUSHROOM SPAWN**

**Culture.** Mushrooms may be grown in cellars, under benches in greenhouses, or in sheds wherever the temperature of 50 degrees can be kept up during the Winter. The beds should be made from November to February, according to the time the Mushrooms are wanted, and it requires about two months for them to begin bearing. Secure fresh horse dung, free from straw and litter and mix an equal bulk of loam from an old pasture with it. Keep this under cover, taking care to turn it every day to prevent it from heating, until the pile is large enough to make a bed of the required size. Three or four feet wide, eight inches deep and any length desired are the proper proportions for a bed, but this may be varied. Prepare the mixture of loam and manure, making the bed in layers and pounding down each with the back of a spade. Leave this to heat through for a few days, and as soon as the heat subsides to 90 degrees make holes in the bed bout a foot apart each way, into which put pieces of spawn 2 or 3 inches in diameter; fill up the hole with compost, and at the expiration of a week or 10 days the spawn will have thoroughly diffused itself through the bed. Spread layer of soil over the heap to the depth of 2 inches, and cover with 3 or 4 inches of hay, straw or litter. Examine bed often to see that it does not get dry. Take special care, however, when water is given that it be at a temperature of 100. One brick to a bed 6 feet square.

## ONION SETS

Plant according to cultural directions given for onions, page —

Postage extra. Consult "Postal directions" on front inside cover.

One quart of sets weighs one pound. Legal weight of onion sets 32 pounds per bushel.

Write for prices.

**White Portugal or Silver Skin.** 20 cts. qt.

**Yellow Danvers.** 15 cts. qt.

**Red Wethersfield.** 20 cts. qt.

**Egyptian or Perennial.** Can only supply Egyptian Sets from August 15th to October 15th. Weight per bushel, 28 lbs.



## ONION SEED

Per Packet, any variety, 5 cents

One ounce to 100 feet of drill, 6 lbs. to Acre

**Culture.** A rich, light, mellow loam is best to insure successful onion raising. In Spring sow about six pounds of seed to the acre, in rows 14 inches apart, and cover to the depth of  $\frac{3}{4}$  of an inch; press the soil firmly about the seed. When the plants are  $3\frac{1}{2}$  to 4 inches high, thin to 2 inches apart. In the process of cultivation, be careful not to stir the soil too deeply, nor to collect it about the growing bulbs. When the tops become entirely decayed, which will occur in late Summer, take the bulbs from drills and leave exposed to the sun for a few days.

With no crop is there more importance of planting good seed than with onions. Do not be led into purchasing old seed which may be offered at cheap prices. Our onion seed is all crop of 1919 and first-class in all respects.

## Special Prices for Large Quantities



Prizetaker

**Yellow Prizetaker.** Excellent keeper, enormous size. Usually a rich straw color, averaging from 12 to 14 inches in circumference. It is the large yellow onion that is offered for sale at our fruit stores and large stores in the Fall. They ripen up hard and fine, flesh is pure white, fine grained, mild, delicate flavor; excellent for Fall or early Winter use. Oz., 20 cts.;  $\frac{1}{4}$  lb., 75 cts.; 1 lb., \$2.25.

**Yellow Globe Danvers.** The standard variety everywhere; of true globe shape and handsome appearance; keeps well. Oz., 20cts.;  $\frac{1}{4}$  lb., 75 cts.; 1 lb., \$2.25.

**Ohio Yellow Globe.** A thoroughbred globe onion. The bulbs are large, of very attractive

shape, small necks, and never grow a scullion; solid, heavy and of bright yellow color. Ripens early and uniformly. An unsurpassed strain; greatest care is used in the selection of bulbs for seed production. Oz., 40 cts.;  $\frac{1}{4}$  lb., \$1.00; 1 lb., \$3.25.

**Southport Yellow Globe.** A large, perfectly shaped Globe Onion and an excellent onion for keeping throughout the winter. A very heavy cropper, handsome in appearance and a good dark yellow color. Oz., 25 cts.;  $\frac{1}{4}$  lb., 75 cts.; 1 lb., \$2.50.

**Red Globe, Southport.** Flesh fine grain, mild and tender; matures quite early; good size; skin dep red. Oz., 25 cts.;  $\frac{1}{4}$  lb., 65 cts.; 1 lb., \$2.25.

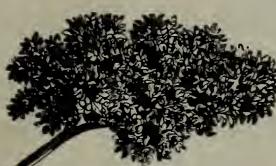
**Large Red Wethersfield.** We have a very fine and select strain of this sort. Color is deep purplish red, flesh white moderately grained and very firm. Yields an enormous amount per acre, and is one of the best Winter keeping onions. Oz., 25 cts.;  $\frac{1}{4}$  lb., 65 cts.; 1 lb., \$2.25.

**White Portugal, or Silver Skin.** Largely grown by market gardeners. Very desirable for family use. Mild flavor, skin silvery white, of handsome appearance. The best sort to sow—for onion sets or for pickling. When sown thickly for either it makes a small, round hard bulb. Oz., 20 cts.;  $\frac{1}{4}$  lb., 75 cts.; 1 lb., \$2.50.

**White Globe, Southport.** A large globe-shaped onion. A popular market variety, an enormous yielder and good keeper. Its clear white skin and uniform shape demand highest market prices. Oz., 30 cts.;  $\frac{1}{4}$  lb., 85 cts.; 1 lb., \$3.00.

## PARSLEY

Per Packet, any variety, 5 cents



Double Curled

5



Long Rooted, or Hamburg

**Culture.** Because of its pleasant flavor, the leaves of Parsley are used extensively as a garnish with other vegetables, either in cooked dishes or salads. Parsley seed germinates very slowly. Sow thickly, in rows one foot apart and half an inch deep, pressing down well after sowing. When well up, thin to six inches apart. Since Parsley lives through the winter, seed may be sown in the autumn for early spring use. One ounce will sow 150 feet of drill.

**Champion Moss Curled.** A compact growing variety. Leaves well curled and of a dark green color. Pkt., 5 cts.; oz., 10 cts.;  $\frac{1}{4}$  lb., 30 cts.; lb., \$1.00.

**Hamburg Short Thick, or Parsnip Rooted.** Grown for the root, which resembles a parsnip in shape and color, although smaller. Foliage nearly same as plain parsley. Oz., 10 cts.;  $\frac{1}{4}$  lb., 30 cts.; lb., \$1.00.

**Extra Double Curled.** Leaves extra curled, dark green color. Oz., 10 cts.;  $\frac{1}{4}$  lb., 30 cts.; lb., \$1.00.

**Plain, or Single.** Leaves flat, deeply cut, but not curled, and very dark green. Plant very hardy. Oz., 10 cts.;  $\frac{1}{4}$  lb., 30 cts.; lb., \$1.00.

## PARSNIP

Sow in April or early in May, as Parsnips require a long season to mature. Their cultivation is otherwise the same as directed for Carrots. They may be dug in the Autumn and stored for winter use, but if left in the ground till the following Spring they are very much improved in flavor. Sow a liberal quantity of seed, as from its nature it does not always come up well.

One ounce will sow 100 feet of drill. Five to six pounds to the acre.



Parsnip Hollow Crowned

**Hollow Crown.** This is the handsomest parsnip grown. Roots half long, thick through, perfectly smooth, clean skin and of a pure white color. Oz., 10 cts.;  $\frac{1}{4}$  lb., 35 cts.; lb., \$1.00.

## PUMPKIN

**Culture.** Usually grown in corn-fields, but if grown as a separate crop, seed should be planted in hills 8 to 10 feet apart each way after weather and soil get warm. Hoe often till vines begin to run. Cut pumpkins from vine after the leaves die, leaving 3 to 4 inches of stem attached, and store in a dry place. Handle carefully and avoid bruising. Use one ounce of seed to 20 hills of most varieties; 3 to 4 pounds per acre.

**Calhoun.** Excels all others in quality as a pumpkin for pies.  $\frac{1}{4}$  lb., 35 cts.; lb., \$1.25.

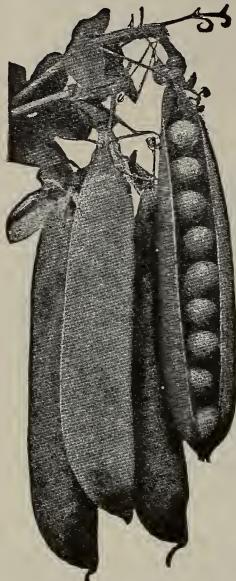
**Japanese Pie.** Crooked neck; quality fine; very productive; ripens early; medium size; excellent for pies. Pkt., 5 cts.; oz., 10 cts.;  $\frac{1}{4}$  lb., 35 cts.; lb., \$1.25.

**Large Cheese.** Fruit flattened, skin smooth, rich cream color; superior quality; excellent for pies.  $\frac{1}{4}$  lb., 35 cts.; lb., \$1.25.

**Connecticut Field.** The popular sort for planting in the cornfield. Used very largely for stock feeding. A most excellent keeper.  $\frac{1}{4}$  lb., 25 cts.; lb., 90 cts.

**King of the Mammoth, or Jumbo.** The largest of all pumpkins. Fruits grow to enormous size, shape almost round, skin orange colored, slightly rough. Flesh deep and of a bright yellow color, quality excellent.  $\frac{1}{4}$  lb., 40 cts.; lb., \$1.50.

**Small Early Sugar.** Most delicious for pies. Fruits deep orange color, roundish-flat, slightly ribbed.  $\frac{1}{4}$  lb., 35 cts.; lb., \$1.25.



Inoculated Peas matured twelve days earlier than those not inoculated.

## GARDEN AND FIELD PEAS

All peas should be inoculated. All Experiment Stations as well as The United States Farm Bureau advise it. Whether in the home garden for family use or for market, it will pay—pay in larger growth, earlier maturity and higher food value, all due to the increased amount of nitrogen supplied the plant.

Use Botzum Brothers' Standard Inoculating Bacteria—so easy to apply—just moisten the seed before planting, full directions in every package.

When ordering state whether for garden or field peas.

Inoculate with Botzum Brothers' Standard Inoculating Bacteria.

### PRICES

Garden Size	\$ .50
Acre Size	.75
2-Acre Size	1.45
4-Acre Size	2.25
6-Acre Size	3.00

**Culture.** Peas do best in a light, rich loamy soil that has been liberally manured the previous season. Plant the smooth varieties as early as the ground can be worked. The wrinkled peas are not as hardy as the smooth kinds, and should be planted later; they are, however, sweeter and better flavored. For a succession, plant every two weeks—until June 1st, then discontinue until August 1st, when the extra early varieties may be planted for a fall crop. When grown for market, peas are rarely staked; in small gardens grow in double rows; 12 inches apart, and stake with brush. They should be kept clean and the earth worked toward them two or three times during growth. Two pounds will plant 100 feet of drill; 120 pounds for an acre.

We sell Peas and all other seeds by the pound rate. See quantity rate at bottom of page.  
One pound equals one pint.

Write for prices on 500 lbs. and upward.

☒ Those Marked with a Star (\*) are wrinkled marrows, and unless otherwise stated should be sown thicker than the round Peas, and not until the ground has become warm, as they are more liable to rot. They are the finest flavored of all Peas.

### Extra Early Dwarf Varieties

\***American Wonder.** It is of dwarf and robust habit, 10 to 15 inches high, and produces a profusion of good sized and well-filled pods of finest flavor. Height, 1 foot. Per lb., 35 cts.; per 100 lbs., \$30.00.

\***Extra Early Premium Gem.** Early, large, well-filled, straight pods. Height 1 foot. Per lb., 35 cts.; per 100 lbs., \$30.00.

\***McLeod's Little Gem.** Very early; prolific; delicious flavor. Height 1½ feet. Per lb., 35 cts.; per 100 lbs., \$30.00.

\***Nott's Excelsior Pea.** The very best, short vine; wrinkled, extra early Pea. Vines are more vigorous and taller than the American Wonder, and the pods are one-third larger, containing often 6 to 8 large Peas very close together, and for sweetness and quality has no equal. Height, 1 foot. Per lb., 35 cts.; per 100 lbs., \$30.00.

\***Sutton's Excelsior.** As early as American Wonder, with much larger pods and more prolific. Height, 1 foot. Per lb., 40 cts.; per 100 lbs., \$35.00.

**Little Marvel.** An English variety that is bound to take first rank among the early dwarf varieties. This Pea is a great improvement over Nott's Excelsior and American Wonder; the pods are larger and contain 1 or 2 more peas. They are dark green instead of light, which makes them more handsome. The pods are completely filled almost to bursting with luscious, sugary peas of finest flavor and best quality, borne on vines that are vigorous and wonderfully prolific. Per lb., 35 cts.; per 100 lbs., \$30.00.

### Extra Early Varieties

**Alaska Pea.** We recommend this new Pea as the greatest money making Pea that has been introduced. Be sure to give it a trial. Height, 2½ feet. Per lb., 30 cts.; per 100 lbs., \$25.00.

**Ameer Pea.** An exceptionally profitable Early Pea. Green seed. Height 2½ ft. Per lb., 30 cts.; per 100 lbs., \$25.00.

**GARDEN PEAS—Continued**

\***Thomas Laxton.** A cross between Gradus and one of the extra-early sorts. It ripens within a day or two of the earliest round varieties. Height, 1 foot. Per lb., 35 cts.; per 100 lbs., \$30.00.

**First and Best.** First-class selected strain of extra early earlies. Height  $2\frac{1}{2}$  feet. Per lb., 30 cts.; per 100 lbs., \$25.00.

\***Large White Marrowfat.** Height 5 feet. Per lb., 25 cts.; per 100 lbs., \$20.00.

**Gradus, or Prosperity.** The most popular, large-podded wrinkled sort. It matures just after the extra-early varieties and produces a good crop of pods four inches long, providing it is planted on light, warm, rich soil, but very disappointing under adverse conditions. The quality is excellent. Height, three feet. Per lb., 40 cts.; per 100 lbs., \$35.00.

**Second Early and General Crop Varieties**

\***Champion of England.** A well known standard variety; sow thickly. Height, 5 feet. Per lb., 35 cts.; per 100 lbs., \$30.00.

**Alderman.** (Admiral Dewey.) Extra large, dark green pods, on order of Duke of Albany. Very fine. Height, 4 feet. Per lb., 40 cts.; per 100 lbs., \$35.00.



\***Telephone Improved.** Robust habit. A single vine produces 18 to 30 unusually long well filled pods of larger size, containing 10 to 12 Peas, often forming a double row, of fine flavor. Height, 5 feet. Per lb., 35 cts.; per 100 lbs., \$30.00.

\***Everbearing.** A long time in bearing. Peas large, pods long.  $1\frac{1}{2}$  feet high. Per lb., 30 cts.; per 100 lbs., \$25.00.

\***Daisy, or Dwarf Telephone.** Plants stout, self-supporting, heavy cropper. Height,  $1\frac{1}{2}$  feet. Per lb., 35 cts.; per 100 lbs., \$30.00.

**Potlatch.** In the Chinook dialect, "Pot-latch" means big dinner, and the name is given to this variety on account of its great productiveness. It is of the Stratagem class, has a very dark green, vigorous foliage; height, 18 inches, producing very beautiful dark green pods from 5 to 6 inches in length, with ten to eleven large wrinkled peas, which are of the most delicious quality. Per lb., 35 cts.; per 100 lbs., \$30.00.

**Improved Stratagem.** This famous variety cannot be recommended too highly, and has become one of our most celebrated and popular varieties; it follows the Premium Gems, and it may be classed with the third early varieties, or those intended for a main crop. It is dwarf, growing but  $2\frac{1}{2}$  feet high, of strong robust habit, requiring but slight support, enormously productive, peas wrinkled, sweet and of delicious flavor. Per lb., 35 cts.; per 100 lbs., \$30.00.

\***Edible Podded or Sugar Peas. Melting Sugar.** Grows to the height of 5 feet; bears a profusion of large, broad pods, which are so brittle that they snap without any string. Per lb., 35 cts.; per 100 lbs., \$30.00.



Telephone

**PEPPER**

**Culture.** Sow in hotbeds in March and when the soil has become warm, set in rows 2 feet apart and 18 inches in the row; hoe frequently; the plants may also be forwarded in small pots.

**Per Packet, any variety, 5 cents**

**Chinese Giant.** This is the largest and finest mild red pepper, being double the size of the Ruby King. It is very productive; plants are vigorous in growth, of stock habit, about 2 feet high, well branched and flesh is extremely mild, as sweet as an apple and very thick. Per oz., \$1.00;  $\frac{1}{4}$  lb., \$3.00; 1 lb., \$10.00.

**Sweet Mountain.** Similar to Bell, or Bull Nose, and claimed by many to be the same thing. We have, however, had this variety grown for us under this name, from selected stock. Oz., 60 cts.;  $\frac{1}{4}$  lb., \$2.00; 1 lb., \$7.00.

**Ruby King.** Probably the best known of the large, longer types. It is very productive; flesh is free from fire, always sweet and tender. It will outyield any other large variety. Makes a handsome appearance in the basket or on the market stall. Oz., 60 cts.;  $\frac{1}{4}$  lb., \$2.00; 1 lb., \$7.00.

**Ruby Giant.** This is a longer Pepper than the Chinese Giant. Said to be a cross between Chinese Giant and Ruby King. An excellent sort for stuffing; very desirable for market. Oz., 60 cts.;  $\frac{1}{4}$  lb., \$2.00; 1 lb., \$7.50.



Ruby King Pepper



Large Red  
Cayenne Pepper

**Large Bell or Bull's Nose.** This is the old and well-known sort, still as popular as ever, notwithstanding the varieties of more recent introduction. Very productive, fruit of good size, fine quality and appearance. Many gardeners cannot be induced to plant any other variety. Oz., 60 cts.;  $\frac{1}{4}$  lb., \$2.00; 1 lb., \$7.00.

**Neapolitan.** The earliest and most productive of all large, mild peppers. The skin and flesh is bright red, and keeps in prime condition for a long time; a good variety for market gardeners. Oz., 50 cts.;  $\frac{1}{4}$  lb., \$1.75; 1 lb., \$6.50.

**Long Red Cayenne.** Long, red, slender, twisted pods, bright red in color; very fiery flavor. Used largely for bunching with pot herbs. Oz., 60 cts.;  $\frac{1}{4}$  lb., \$2.00; 1 lb., \$7.00.

**Pimento.** This variety of recent introduction is an absolutely sweet pepper and not only desirable for salads and stuffed peppers, but is also used largely by canners. The flesh is very thick and solid, mild and of superior flavor. Oz., 60 cts.;  $\frac{1}{4}$  lb., \$2.00; 1 lb., \$7.00.

**Small Red Chili.** Red, conical pods, about 2 inches long, very hot and generally used for seasoning and pepper sauce. Oz., 60 cts.;  $\frac{1}{4}$  lb., \$2.00; 1 lb., \$7.00.

**Golden Bell, or Golden Dawn.** A very beautiful variety, resembling the Bell in shape and habit, but of a beautiful golden color and of mild flavor. Oz., 60 cts.;  $\frac{1}{4}$  lb., \$2.00; 1 lb., \$7.00.



Large Bell or Bull  
Nose Pepper

**POTATOES**

Our seed potatoes are Northern grown. They are grown for us from genuine stock in Northern New York especially for seed. This soil is gravelly loam, and lies high and rolling, and contains all the elements necessary to produce potatoes in perfection. The advantages from such seed are, early maturity, increased yield, vigorous growth, with vitality to resist disease.

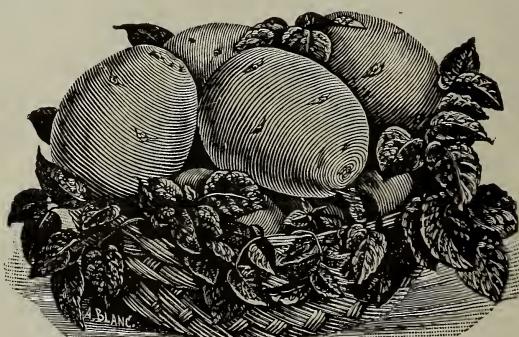
**Early Rose.** This variety is too well known to need a description. After many years it is as popular as ever. Market price.

**Early Six Weeks.** One of the earliest, yields well; color light pink; flesh white and floury. Market price.

**Early Ohio.** Tubers round or oblong; of vigorous growth and excellent quality. Market price.

**Irish Cobbler.** This extra early variety is one of the very best. It matures in 7 or 8 weeks. Tubers, large, nearly round, very heavy yielder; clean, smooth, white skin; of excellent quality. Market price.

**Carman No. 1.** A distinct variety; second early; uniform size, immense yielder. Market price.



Seed Sweet Potatoes—Iowa Stock

**Yellow Jersey, Yellow Nansemond.** Subject stock unsold; consignee's risk and measure. Market price.

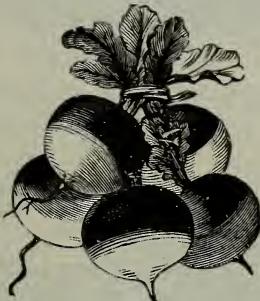
**RADISH**

2 Ozs. to 100 Feet of Drill  
**Early Round Varieties**

**Culture.** Sow as soon as the ground is dry in the Spring, in rows 8 to 12 inches apart, every week or 10 days for succession, up to the middle of June, after which they are little used, unless a cool northern spot can be found where the ground is shaded during part of the day. They should be sown in light, rich soil, as a crisp Radish cannot be produced in heavy soils. Sow also in early Fall for late crops and Winter use. Sow 8 to 12 pounds to the acre. Radishes should be eaten when quite small; it is a mistake to let them grow too long and too large. This applies particularly to Ruby King and small turnip-shaped sorts.

All varieties, oz., 10 cts.;  $\frac{1}{4}$  lb., 25 cts.; 1 lb., 90 cts.

**Early Scarlet Turnip—White Tipped.** A beautiful variety; deep scarlet with white tip. It



**Early Scarlet White Tipped Turnip Radish**

is very ornamental for table use, and is very popular as a market variety. It is of the same size and shape as the scarlet turnip variety.

**Long Varieties**

Per Packet, any variety, 5 cents

**Early Long Scarlet Short Top.** This is undoubtedly the best standard variety for private garden and market use. It grows 6 or 7 inches long, half out of the ground. It is very brittle and crisp and of quick growth. Color,



**Early Long Scarlet Radish**

bright scarlet; small top, tapers regularly to the root, and is uniformly straight and smooth.

**Long Brightest Scarlet.** Extra early, the roots being fit for use about 25 days after sowing; very bright color; quite unique, being the most

fiery scarlet in any kind of radishes. It is very lightly tipped with white, and the flesh is crisp and tender.

**French Breakfast.** A medium sized radish, olive shaped, with small top, of quick growth, very crisp and tender; of a beautiful scarlet color, except near the root, which is pure white.

**Icicle.** A magnificent white variety of mild flavor; grows 3 $\frac{1}{2}$  to 4 inches long in twenty-two days. Also suitable for summer as well as early use.

**Long White Vienna, or Lady Finger.** Of attractive tapering shape, about 3 inches long; matures in twenty-five days.

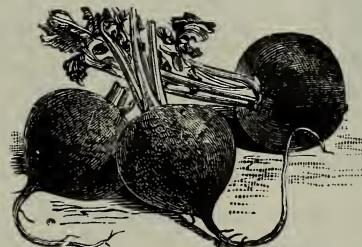
**Giant White Stuttgart.** Root top-shaped, often  $\frac{3}{4}$  inch in diameter, and about 3 inches in depth; skin and flesh white. Mature in 6 to 8 weeks, but is usually pulled about 5 weeks from sowing.

**White Strasburg.** Somewhat pointed, 4 to 5 inches long and about 2 inches in diameter; flesh white, and tender. Roots may be pulled 6 weeks after sowing.

**Early Scarlet Globe.** This variety makes roots fit to pull as early as Non-Plus-Ultra, but they are much larger when full size, and for this reason are very popular in some markets. Roots round or slightly olive shaped; color rich, deep scarlet; flesh white and tender.

**Winter Varieties**

**Round Black Spanish.** Roots round, sometimes top-shaped, three to four inches in diameter. Skin black, flesh white and pungent.



**Round Black Spanish Radish**

**Long Black Spanish.** This variety is sown the last of Summer for Fall and Winter use. Grows to a large size; oblong shape; quite solid. If stored in pits, or packed away in sand, it will keep until spring.

**China Rose-Colored.** It is of a half-long shape, pink color, flesh solid. It has not that strong flavor peculiar to the Black Spanish and keeps equally well. It should be sown during August.

**California White Mammoth.** A giant white-fleshed Fall radish. It grows from 8 to 12 inches in length and about 2 $\frac{1}{2}$  inches in diameter, the flesh being solid, tender and of very good flavor, which is maintained many weeks after gathering.

**RHUBARB OR PIE PLANT**

Per Packet, 5 cents

**Linnaeus.** The earliest variety grown; stalks medium size and numerous.  $\frac{1}{4}$  lb., 60 cts.; 1 lb., \$2.00.

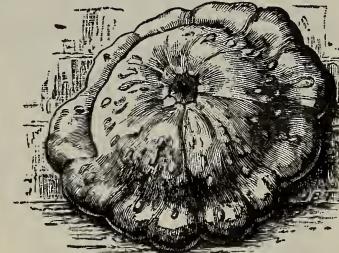
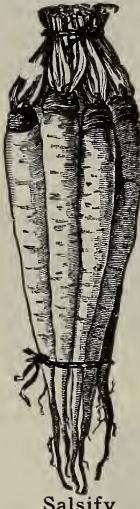
**Victoria.** Stalks very tall and large. Very productive.  $\frac{1}{4}$  lb., 60 cts.; 1 lb., \$2.00.

**SALSIFY OR OYSTER PLANT**

One Ounce to 100 feet of drill. 10 to 12 pounds in drills for an acre. 25 to 35 pounds broadcast for an acre.

**Culture.** Sow as early as the ground can be worked in the Spring, in drills 12 inches apart, 1 inch deep, and thin out to 6 inches to the row. Keep them free from weeds. Cultivate the same as Carrots and Parsnips. Sow 8 to 10 pounds to the acre. One ounce to 50 feet of drill.

**Mammoth Sandwich Island.** This new Salsify, recently introduced from the Sandwich Islands, grows fully double the size of the common variety, and is superior in quality. It is pure white in color and is invaluable to market gardeners. Oz., 25 cts.;  $\frac{1}{4}$  lb., 75 cts.; lb., \$2.50.



Botzum's Extra Large Golden Bush Squash

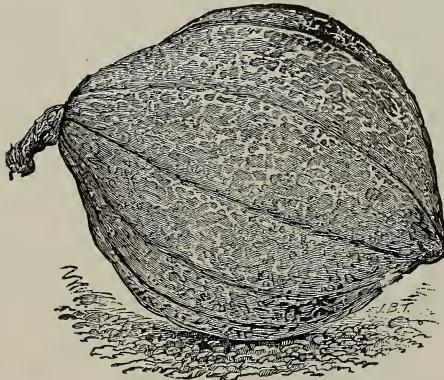
**SQUASH**

1 Oz. Bush Varieties for 40 hills; large Seeded Varieties, 15 hills; 2 to 3 Lbs. Bush; 3 to 4 Lbs. Large Seeded per acre.

**Salsify**

**Culture.** Sow in hills in the same manner and at the same time as Cucumbers and Melons, the bush varieties 3 to 4 feet apart, and the running kind from 6 to 9 feet apart.

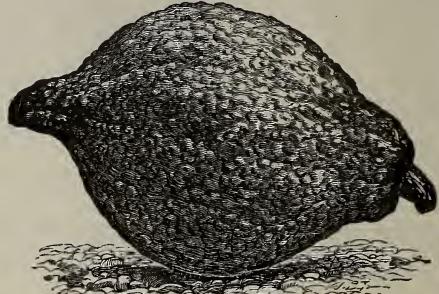
**Botzum's Extra Large Golden Bush.** A very early, flat, scalloped variety of largest size; color, yellow; flesh, pale yellow and well flavored. Oz., 15 cts.;  $\frac{1}{4}$  lb., 40 cts.; lb., \$1.25.



Boston Marrow Squash

**Giant Crook-Neck.** This strain is a great improvement on the old variety of Crook-neck. It is larger and better in every way. Oz., 20 cts.;  $\frac{1}{4}$  lb., 60 cts.; lb., \$2.00.

**Cocozelle, or Italian Marrow.** A very distinct variety, the skin smooth, of a dark green marbled with yellow, or with pale green in stripes. The fruit is best when 6 to 8 inches long; very popular among the Italians. Pkt., 5 cts.; oz., 20 cts.;  $\frac{1}{4}$  lb., 50 cts.; lb., \$1.75.



Improved Hubbard

**Improved Hubbard.** Best winter squash known, fine grained and dry; our strain is excellent. Oz., 20 cts.;  $\frac{1}{4}$  lb., 60 cts.; lb., \$2.00.

**Boston Marrow.** Is the favorite Winter Squash of the Eastern States; it is of fine flavor, and a good keeper.  $\frac{1}{4}$  lb., 30 cts.; lb., \$1.10.

**Warted Hubbard.** This is one of the best in quality of all winter sorts. The flesh is dry and sweet. Shell very dark green and hard, which insures long keeping qualities. It is considered an improvement on the old type of Hubbard, on account of its warted skin. Oz., 20 cts.;  $\frac{1}{4}$  lb., 60 cts.; lb., \$2.00.

**Golden Hubbard.** This is a very distinct sort Hubbard, but a little smaller; earlier to mature, and of a rich orange-red color, instead of the dark olive-green of the old Hubbard. Oz., 20 cts.;  $\frac{1}{4}$  lb., 60 cts.; lb., \$2.00.

**SPINACH**

Round Thick Leaved

All varieties, oz., 10 cts.;  $\frac{1}{4}$  lb., 20 cts.; lb., 75 cts.

**Bloomsdale Curled Savoy Leaved.** This is an old and well-known variety which is exceedingly popular in all sections of this country, and is especially recommended for early Winter use; the leaves are beautifully crimped or blistered and of a very dark green color.

**Round Thick Leaved.** Large, thick, fleshy leaves; a favorite variety.

**Long Standing.** Stands a long time before going to seed; splendid for spring sowing.

**Victoria.** A new variety distinguished by the dark green color of its leaves and also for its long standing qualities.

## TOMATO

**Culture.** For first early Tomatoes select varieties of the earliest types, and start the plants under glass during February. When plants are 2 inches high, transplant into flats, thumb pots or plant boxes, and later on transplant again, giving more room. Never crowd the plants, but keep them short and stocky. Plants already in bloom or with fruit set, if in wooden plant boxes or in pots, may be transplanted to the open ground without disturbing their roots, and will continue to bloom and fruit without check. Set these sorts 4 feet apart each way in warm, mellow soil of fair fertility as soon as danger from belated frost is past. For main crop, the plants can be started somewhat later, in hotbed or cold frame, once transplanted to keep them stocky, and then set in open ground, in fairly good warm soil, 5 feet apart each way. One ounce of seed will produce 3,000 to 4,000 plants.

### Red Tomatoes

**"John Baer" Tomato.** "John Baer" tomato produces perfect, solid, high crown, beautiful, brilliant red shipping Tomatoes in 30 days from strong plants grown from potted plants if the roots are undisturbed when set out. Oz., 25 cts.;  $\frac{1}{4}$  lb., 85 cts.; lb., \$3.50.

**Spark's Earliana Tomato.** It is remarkable for its earliness, very large size, handsome shape and bright red color. Its solidity and fine qualities are equal to the best medium and late sorts. Oz., 20 cts.;  $\frac{1}{4}$  lb., 75 cts.; lb., \$2.50.

**New Stone Tomato.** Selected Stock. We have the truest, purest, cleanest stock, free from rust and blight, of this most valuable Tomato. Oz., 20 cts.;  $\frac{1}{4}$  lb., 60 cts.; lb., \$2.00.

**Livingston's Paragon.** Bright red, round, very productive. Oz., 20 cts.;  $\frac{1}{4}$  lb., 75 cts.; lb., \$2.50.

**Bonny Best Early Tomato.** This is a very early and very popular variety, quite as early as the best strains of Earliana Tomato; it is a vigorous grower, enormously prolific, with splendid foliage and of an intense velvety glowing scarlet color; ripens evenly all over and up to the stem. Oz., 25 cts.;  $\frac{1}{4}$  lb., 85 cts.; lb., \$3.00.



**Ponderosa.** Very large heavy, smooth Tomato; very fine for home garden Oz., 35 cts.;  $\frac{1}{4}$  lb., \$1.10; lb., \$4.00.

**Chalk's Early Jewel.** This famous early variety originated with a market gardener near Norristown, Pa., who is noted for the fine selection of almost every crop he grows; it is a remarkable variety which follows the Earliana in ripening, more solid and of finer form. Color bright scarlet, and a very desirable variety for either market or private garden. Pkt., 5 cts.; oz., 20 cts.;  $\frac{1}{4}$  lb., 75 cts.; lb., \$2.50.

**Livingston's Perfection.** A very desirable early variety. The fruit is almost round, ripens clear up to the stem, is solid and rich in flavor; the skin is both thin and tough, making it a good shipper, while its clear, bright scarlet color makes it very attractive in appearance. Oz., 20 cts.;  $\frac{1}{4}$  lb., 60 cts.; lb., \$2.00.

### Pink Tomatoes

**Early Detroit Tomato.** Fruit very smooth, uniform in size, nearly globe shape, firm, excellent quality, large purplish pink in color. Oz., 25 cts.;  $\frac{1}{4}$  lb., 85 cts.; lb., \$3.00.

**Dwarf Champion.** Dwarf, stiff habit, dark green foliage, scarcely needing any support. It is very early and wonderfully prolific. Color same as Acme. It is perfectly round and smooth, of medium size. Oz., 25 cts.;  $\frac{1}{4}$  lb., 85 cts.; lb., \$3.00.

**Livingston's Globe.** This splendid Tomato is attracting a great deal of attention among Southern Shippers. As a Tomato for the early market, it will pay you to give it a trial. Oz., 25 cts.;  $\frac{1}{4}$  lb., 85 cts.; lb., \$3.00.

**Livingston's Beauty Tomato.** Large, smooth, dark pinkish red, thick flesh. Oz., 25 cts.;  $\frac{1}{4}$  lb., 85 cts.; lb., \$3.00.

**June Pink Tomato.** This is the Pink Earliana Tomato and where a Pink Tomato is in demand, this will be the earliest and most profitable to grow. Oz., 35 cts.;  $\frac{1}{4}$  lb., \$1.00; lb., \$3.50.

**Improved Acme.** Very early, of medium size; perfectly smooth, very solid and a great bearer. Crimson color with a pinkish cast. Oz., 25 cts.;  $\frac{1}{4}$  lb., 85 cts.; lb., \$3.00.

**The Trucker's Favorite Tomato.** Its fine, smooth, uniformly shaped fruits command the highest market prices. The fruits are thick meated and very solid; the meat is of the finest flavor, making the Tomatoes equally good for slicing and for cooking purposes. The vines are of strong growth, not subject to rust or blight, and bear enormous crops till frost. Oz., 35 cts.;  $\frac{1}{4}$  lb., \$1.00; lb., \$3.50.

**Dwarf Stone.** A very remarkable dwarf variety. Stronger in growth and more erect than the Dwarf Champion, and fruit equal to the regular Stone in form, solidity and color; of fine flavor and highly recommended as a dwarf variety. Oz., 25 cts.;  $\frac{1}{4}$  lb., \$1.00; lb., \$3.25.

**TURNIP**

Per Packet, any variety, 5 cents

**Early Snowball.** Medium sized, round, pure white; excellent for table use. Matures in 6 weeks from time of sowing. Oz., 15 cts.;  $\frac{1}{4}$  lb., 40 cts.; lbs., \$1.00.

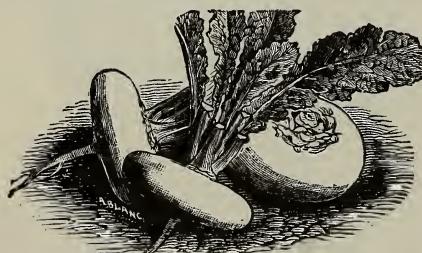


White Egg

**Early White Egg.** A quick growing egg-shaped, perfectly white variety, growing half out of the ground, with small top and rough leaves. Its smooth, white skin and quick growth makes it particularly desirable for market purposes. The flesh is very sweet, firm and mild, never having the rank, strong taste of some varieties. Oz., 15 cts.;  $\frac{1}{4}$  lb., 40 cts.; lb., \$1.00.

**Purple Top—Strap-Leaved.** The standard of this part of the country. Superior for early or late planting. Round, flat, good sized, small top with but few leaves; flesh vary fine grained; flavor good. Oz., 10 cts.;  $\frac{1}{4}$  lb., 25 cts.; lb., 90 cts.

**Red Top White Globe.** The handsomest and most salable Turnip. As a profitable sort for home or market it is unsurpassed. It is a large rapid growing sort, with globular shaped roots. Flesh pure white. The skin is white and purple, the under portion being white and the top bright purple. (See illustration.) On account of its shape, it will out-yield any other sort. Imported seed. Oz., 15 cts.;  $\frac{1}{4}$  lb., 40 cts.; lb., \$1.00.

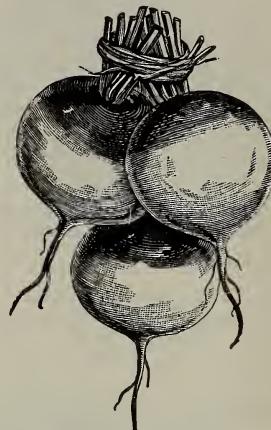


Purple Top Strap-Leaved

**Cow Horn.** This variety is pure white, except a dash of green at the crown, and in shape is long like a carrot and generally crooked,

hence its name. Oz., 15 cts.;  $\frac{1}{4}$  lb., 40 cts.; lb., \$1.25.

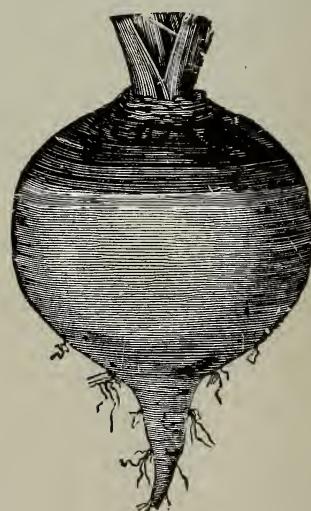
**Golden Ball.** Undoubtedly among the most delicate and sweetest yellow fleshed turnips yet produced. Not of large size, but firm, hard and of the most excellent flavor. Keeps well. Oz., 15 cts.;  $\frac{1}{4}$  lb., 40 cts.; lb., \$1.00.



Red Top White Globe

**SWEDES OR RUTA BAGAS**

**Yellow, Purple Top Ruta Baga.** Hardy and productive, flesh yellow, of solid texture, sweet and well flavored; shape slightly oblong; terminates abruptly with no side or bottom roots; color deep purple above and bright yellow under the ground; leaves small, light green, with little or no neck; the most perfect in form, the richest in flavor, and the best in every respect. Oz., 15 cts.;  $\frac{1}{4}$  lb., 40 cts.; lb., \$1.00.



American Ruta Baga

## HERBS



Sweet Basil

Sage

Sweet Marjoram

Summer Savory

Thyme

## AROMATIC, MEDICINAL AND POT HERBS

Packets 5 cts., except where noted

		Oz.	1/4 lb.	Lb.
Anise .....	Used for Flavoring .....	\$0.15	\$0.40	\$1.50
Balm .....	Very Fragrant Leaves .....	.25	.90	3.00
Basil, Sweet .....	Broad Leaves .....	.20	.60	2.00
Borage .....	Used for Flavoring and Salads.....	.25	.75	2.50
Bene .....	Leaves Used for Dysentery .....	.15	.50	1.50
Caraway .....	Seeds Used for Flavoring .....	.15	.40	1.50
Chervil, Plain .....	Leaves Used for Flavoring .....	.15	.40	1.50
Chervil, Curled .....	Leaves Used for Flavoring .....	.15	.40	1.50
Coriander .....	Seeds Aromatic .....	.10	.30	1.00
Dill .....	Seeds Used for Flavoring .....	.15	.50	1.50
Fennel, Sweet .....	Used in Sauce .....	.10	.30	1.00
Fennel, Florence .....	Sweet Aromatic Flavor (See 61) .....	.15	.50	1.50
Horehound .....	Used for Coughs .....	.35	1.00	3.50
Hyssop .....	Has Medicinal Qualities .....	.20	.60	2.00
Lavender .....	Used for Perfume .....	.25	.90	3.00
Marjoram, Sweet .....	Leaves Used for Flavoring .....	.40	1.25	4.50
Mint, Curled .....	For Flavoring. 100 Seeds, 30 cts....			
Rosemary .....	Heads Very Fragrant .....	.50	1.75	6.00
Rue .....	A Medicinal Plant .....	---	---	---
Saffron .....	Used for Medicinal Purposes .....	.35	1.15	4.00
Sage, Broad Leaf .....	A Highly Aromatic Herb .....	.45	1.50	5.00
Savory, Summer .....	A Culinary Herb .....	.35	1.00	3.50
Tansy .....	Generally Used in Bitters .....	.35	1.00	3.50
Thyme, Broad-Leaf English .....	Used in Seasoning .....	.45	1.50	5.00
Thyme, French .....	Used in Seasoning .....	.45	1.50	5.00
Wormwood .....	Has Medicinal Quaity .....	.45	1.50	5.00

## REMEMBER

WE SELL BASKETS and MARKET BOXES

ALL SIZES

IN ANY QUANTITY

# CLOVER AND FIELD SEEDS

## CLOVER SEED

### All Very Highest Quality

Clover and Grass Seeds fluctuate greatly in value in the selling season. We sell at market values. Best to write for prices before ordering.



Inoculated

RED CLOVER

Not Inoculated

Remember, inoculating bacteria is grown from bacteria—germs—taken from the nodules on the roots of the plant. Each legume has a different bacteria, a distinct germ. There is a separate bacteria grown for each of the varieties of clover. In ordering state whether it is wanted for red, alsike, or sweet clover, or any other variety. Use Standard Inoculating Bacteria and succeed with Clover.

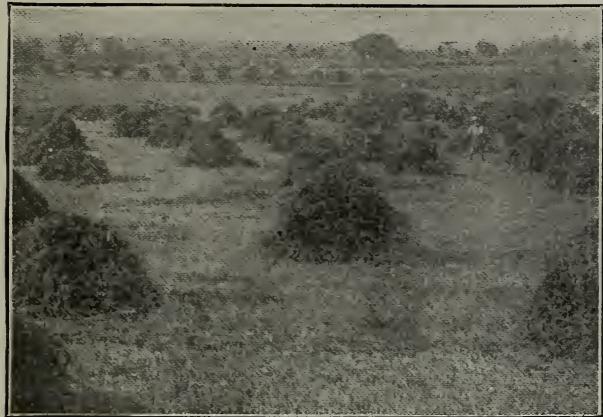
Acre Size -----	\$ .75
2 Acre Size -----	1.45

4 Acre Size -----	2.25
6 Acre Size -----	3.00

**Alfalfa, or Lucerne.** Make the most valuable and largest yielding hay crop known. Can get four to five cuttings a year from sowing. For some time, it was thought not to be adaptable to our section, but inoculation methods have disproved this. Loose or loamy soils, or soils with gravelly or sandy subsoils, or deep limestone soils, are admirably adapted for its growth, though clay or very heavy soils are not. Be sure to properly prepare your land, liming it if ground is sour and inoculate the seed before sowing. While the early fall is the best time for sowing seed, it can be sown in the spring, in March or April, and a satisfactory stand will make one or two cuttings the same year, and full cuttings the following year. It should always be cut before coming into full bloom, and handled as little as possible thereafter. A firm seed bed is of the first importance, then sow good seed 20-30 lbs. per acre, generally broadcast. A slight top dressing of well rotted stable manure is advisable. With this, and ordinary care, an Alfalfa field will last 15-20 years. Some planters sow a light seeding of Alfalfa with Clovers and other grasses, thus both determining if the land is adapted for Alfalfa, and also thus inoculating the land for it afterwards, in case it does prove adaptable.

**Alsike, or Swedish Clover.** This is somewhat similar in growth and appearance to Red Clover, but it is harder and stands cold weather better than Red Clover, and where conditions of soil and lateness of seeding make any possibility of winter-killing, it is advisable to sow Alsike Clover, or at least to sow it in mixtures with other clovers. It does well on stiff or clay soils. It is a perennial and possesses long fibrous roots, taking a deep hold on the soil. Sow in the spring or fall at the rate of 12 lbs. per acre. **Per bu. (60 lbs.)**

**White Dutch Clover.** A small low growing variety, with creeping stems; mixed with Blue Grass or Perennial Rye Grass, or Timothy, it makes a permanent pasture of great value. It is very largely used in lawn and pasturage mixtures, and is indigenous to the soils throughout this section. It makes a small, close compact growth, covering the ground like a carpet. Succeeds and does well all throughout the North. Its blossoms are round, white, tinged with red, and sweet scented; stems fine and palatable, with numerous leaves of bright green color, blotched with white. Sow either in the spring or fall. When sown by itself, sow at the rate of ten lbs. per acre. It is better, however, sown in mixture with other grasses. **Per bushel (60 lbs.)**



Inoculated Alfalfa. Three cuttings like this per year.

**Crimson.** Or more commonly called Scarlet, Italian or German Clover, is an annual of French origin, makes a growth from 20 to 30 inches high, has a bright crimson blossom from  $1\frac{1}{2}$  to 3 inches long, and when in full bloom with its luxuriant growth of green foliage and its crimson bloom, is a thing of beauty. It is a winter crop, and should be sown in July, August or September of each year. As a manorial crop its worth in fertilized value is hard to compute, being equal to one to three tons of commercial fertilizer. Sow 15 pounds to the acre. Per bushel (60 lbs.)

**Medium, or Common Red.** This is the most important of all varieties of Clover for practical farm purposes; makes excellent pasturage, and fine hay crops when sown with Timothy, Orchard and other grasses, as the latter ripen about the same time. It is one of the best fodders for milch cows or sheep, and improves the land by adding humus to the soil. It is a perennial, growing to a height of  $1\frac{1}{2}$  to 2 feet, yields crops several years from one seeding, and on good land, yields two to three cuttings annually. It should be cut for hay when in full bloom. Sown by itself, sow either in fall (July 1st to September 5th) or in spring (February 1st to April 15th) at the rate of twelve to fifteen pounds per acre, according to nature of the soil. Per bushel (60 lbs.)

### INOCULATE ALFALFA

Alfalfa, like all clovers, must be inoculated. No farmer, even in the deep rich soils of the Western States, will attempt to grow this crop without it. No soil has in it enough nitrogen to grow successive crops of alfalfa, year after year, without exhaustion. Some years ago the West thought they could do it, but their alfalfa began turning yellow, due to lack of nitrogen. Today, practically all alfalfa west of the Mississippi is inoculated. How then can we expect to succeed with this crop on the much thinner and poorer soils of the Eastern and Central States, unless we inoculate.

Inoculated alfalfa will take its nitrogen from the air instead of from the soil, and succeed, where without it, it would fail.

Plenty of lime, a firm weed-free seed bed, good drainage, and inoculation—these are the secrets of alfalfa success.

Use Botzum Brothers' Standard Inoculating Bacteria and succeed with Alfalfa.

#### PRICE

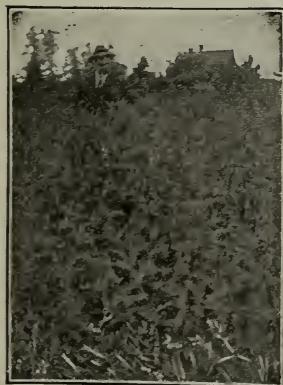
Acre Size	\$ .75
2-Acre Size	1.45
4-Acre Size	2.25
6-Acre Size	3.00

### White Blossom, Sweet Clover or Bokhara.

Is a hardy biennial plant of an erect and branching habit. It starts up early in the spring and in its second year it reaches a height of from 5 to 12 feet, blooms, matures its seed and dies. However, there is usually enough seed scattered to reseed, and the crop is continuous unless cut before seed ripens. When young it resembles Alfalfa. Sweet Clover has a peculiar bitter taste. The flowers and leaves possess an odor like vanilla. It is an excellent bee food. Grows well in all climates and soils, whether gravel, clay or sand. Stands drouthy weather equally as well as alfalfa, yet will grow in wet places. It is a deep rooting legume, storing up Nitrogen like Cow Peas, thus possessing great fertilizing properties. Two crops can be cut in a season. It is a good silo feed. Sow in fall or spring, 25 lbs. per acre. Per bushel (60 lbs.)

**Red Mammoth, or Pea Vine.** Mammoth or Sappling Clover, sometimes called Pea Vine Clover, is a variety of the common Red Clover, maturing about ten days later. The larger size of Mammoth Clover plants makes it of slightly greater value than Red Clover as a soil improver; as hay it is somewhat coarser. Sow in the same manner as Red Clover. Per bushel (60 lbs.)

### INOCULATE VETCH



Vetch, that is the Russian or hairy vetch, called also winter and sand vetch, is a valuable legume.

It is especially valuable for fall and spring pasturage, often in the North remaining green until Christmas, and being the first pasture plant available in the spring.

Vetch is especially valuable as a soil builder. If inoculated, it will take nitrogen from the air, nitrogen enough to supply itself and far more, the surplus remaining in the ground to improve the soil.

But vetch, as any other legume, can not take nitrogen from the air unless inoculated. The work must be done by the bacteria in the nodules. Without bacteria it will exhaust the land just the same as timothy or any other non-legume. Furthermore vetch is one of those legumes—like alfalfa and soy beans—requiring inoculation for its proper growth.

Inoculate with Botzum Brothers' Standard Inoculating Bacteria. Insure your VETCH Crop.

State that Botzum Brothers' Standard Inoculating Bacteria is wanted for Vetch.

#### PRICE

Acre Size	\$ .75
2-Acre Size	1.45
4-Acre Size	2.25
6-Acre Size	3.00

Inoculated Vetch

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

## MISCELLANEOUS FARM SEEDS

### VETCH

**Hairy, or Sand Vetch** (*Pisum Villosa*). An excellent plant for a winter crop to prevent leaching; also for forage and fertilizing. If sown in August or September it will make a good crop of forage the following spring. It is quite hardy and very seldom winter kills in the vicinity of Philadelphia, unless planted on wet, heavy soil. It is being used extensively in this vicinity for plowing under; also for dairy stock and poultry pasture. Sow 1 to  $1\frac{1}{2}$  bushels per acre. If sown with rye, use  $\frac{3}{4}$  to 1 bushel of Vetch with  $\frac{1}{2}$  bushel of rye.

### VETCH OR TARE

**Spring** (*Vicia Sativa*). A splendid pea-like plant grown as an annual in the North. Desirable as a forage plant, and valuable as a cover-crop for orchards. Culture same as for field peas. Sow 90 to 120 lbs. per acre.

### GENUINE DWARF ESSEX RAPE

Two pounds equals one quart

There is no plant that will give as heavy a yield of forage at such a small cost as this, and its general cultivation would add largely to the profits of American farms. Especially valuable for green manuring and pasture. When fed off by sheep it will probably do more to restore and make profitable exhausted soils than any other plant.

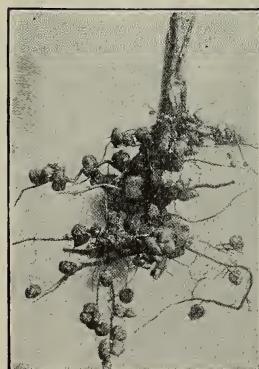
Ground should be prepared same as for turnips. Sow in June or July with a turnip drill, in rows two and one-half feet apart, at the rate of two and one-half pounds of seed per acre. It may be sown broadcast, either with other fall forage crops or by itself, using from one to five pounds of seed per acre.

### COW PEAS

(Prices subject to change)

Invaluable for plowing under green manure, or they can be cut green for feeding or can be cured like clover and fed through the winter.

**Whipporwill.** Very valuable kind, growth medium, producing large quantities of well-filled



Soy Bean Root

pods, which are very long. The plant makes excellent forage for cattle and hogs. Per bushel (60 lbs.)

### EDIBLE COW PEAS

Make Profitable Money Crops to Plant Either for Sale, Green or Dry

The varieties named below are not only largely used all through the South and in other parts of the country as forage and soil-improving crops, but the dried peas are readily salable during the winter at much higher prices than ordinary cow-peas. The dried peas of the varieties named below are sections of the country as table peas during the winter, and the demand for them is constantly on the increase.

**Black-eyed Susan.** The large Black-eye Peas are more prolific, better flavored and bring a higher price than the ordinary Black-eye, and farmers will find it more profitable to plant these than the ordinary Black-eye; they make a more profitable crop to grow for picking the dry peas for sale in our markets during the winter.

### SOY OR SOJA BEANS

Culture. Sow about May 1st according to instructions given below.

The use of Soy Beans is constantly increasing on account of their value as a forage crop as well as their great fertilizing properties. They can be sown with cow-peas to hold the pea vines off the ground, which thus can be cut and cured to better advantage for hay. They can be grown generally where corn can, and do equally well on light and heavy soils. Where a crop of Soy Beans is growing it is nearly impossible for weeds to grow. For hay or fertilizer they should be sown from 60 to 90 pounds to the acre. When sown for ensilage it is better to sow in corn at 15 to 20 lbs. to the acre. Sow for the shelled Beans at the rate of 60 to 90 pounds to the acre, in drills  $3\frac{1}{2}$  feet apart, and cultivate.

**Wilson Black.** One of the best, in our opinion, for the Northern States, where a quick, early variety is desired. Average height on good land is  $2\frac{1}{2}$  to 3 feet. A very prolific variety, and requires about 90 days to be ready to cut for hay.

**Mammoth Yellow Soy.** This variety will not mature seed in the North, but makes a large growth of forage and is used for hay and to plow under to improve the soil.

### INOCULATE SOY BEANS

Soy Beans must be inoculated to succeed. All Experiment Stations advise it and farmers everywhere are doing it. Very few soy beans are planted these modern days without being inoculated.

Botzum Brothers' Standard Inoculating Bacteria will do the work. And it is so easy. Nothing to do but moisten the seed, before planting, with the bacteria. Full directions in every package.

There are billions of bacteria in every bottle of Botzum Brothers' Standard Inoculating Bacteria. Each of these will form the nucleus of a nodule, each nodule filled with millions of bacteria and every germ a chemical specialist, working day and night, taking nitrogen from the air to supply the plant. This not only feeds the plant, but as the nodules decay the nitrogen is left in the soil to supply future generations of plants, thus building up the soil instead of exhausting it.

Inoculate with Botzum Brothers' Standard Inoculating Bacteria.

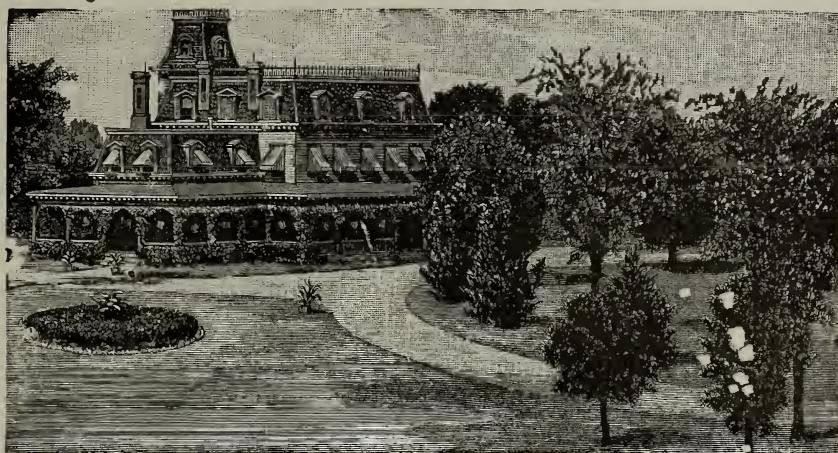
### PRICE

Acre Size	\$ .75	4-Acre Size	2.25
2-Acre Size	1.45	6-Acre Size	3.00

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

# BOTZUM'S FAMOUS LAWN GRASS SEEDS

## HOW TO MAKE A LAWN



Have soil thoroughly spaded up, enriched with commercial fertilizer or well rotted manure, level and roll it well to make compact. Select a still, damp day for seeding; now sow one-half of the seed from north to south and half from east to west, and roll again, when grass comes up re-planting bare spots. When grass is 2 inches high cut it, and as necessary thereafter. Don't rake up short clippings as they make a good mulch. Always thoroughly soak a lawn when sprinkling, when required, but never sprinkle lightly.

Many people are disappointed in starting a new lawn by the use of stable manure, and blame the seedsman for selling poor seed, when the quality of the seed may be of the very best; but was spoiled by the use of manure.

Foul seeds are found in great quantity in hay shipped in and fed to horses and cows, and from the stable find their way onto the lawn. No matter how pure and true to name the grass seed you use is, the weeds sowed with the manure will spoil the results.

In starting a new lawn in the Spring, if the ground is not prepared the previous Fall, we advocate the use of concentrated commercial fertilizers. There are generally weed seeds enough in the soil to spoil, to a certain extent, the good quality of grass seed you may use without adding more by the use of stable manure. Commercial fertilizers are so much more convenient to apply and act so much quicker that their use should be more common, even if cost is a little higher.

For best results apply commercial fertilizers in early Spring and again in mid-Summer. One hundred pounds will cover about three thousand square feet.

**"Cleveland Parks" Lawn Seed.** Upon the preparation of the soil before the seed is sown, depends the life of the lawn. The soil, if sandy, requires the addition of good loam and humus. The next essential is good seed. Our seed is an intelligently arranged combination of several fine leaved dwarf grasses, which are at their best during different months of the year, thus insuring that carpet of smooth green so much desired by lovers of good lawns. Our lawn seed is as fine in quality as careful selection of seeds can make it and while some mixtures on the market weigh but 15 lbs. to the bushel, our Cleveland Parks Lawn Grass Seed weighs 20 lbs., being free from chaff and other foreign matter.

One pound is sufficient for a space of 10 ft. x 10 ft. Five bus. are properly necessary for one acre of new lawn. For renovating old lawns use about half the quantity. 1 lb., 45 cts.; 1 bu. (16 lbs.), \$6.50.

**Sixth City Lawn Seed.** A good mixture of grasses that are less expensive than our Cleveland Parks mixture. 1 lb., 40 cts.; 1 bu. (14 lbs.), \$5.00.

**Choice Mixed Lawn Seed.** A good mixture of grasses that are less expensive than those used in our other mixtures. Per lb., 30 cts.; per bu. (14 lbs.), \$4.00.

**Shady Nook Lawn Grass Seed.** On many lawns are bare spots under the shade trees. Such spots are frequently sour, perhaps covered with a green scum or moss. In such cases apply hydrated lime, which is powdered fine, at the rate of one bushel per thousand square feet, removing all moss or scum first and then loosening the soil in same manner as already prescribed for regular lawn making. Our mixture of grass seed for shaded spots is one best adapted to the requirements of much shaded lawns and will grow perfectly where ordinary grass mixtures would fail. Sowing instructions same as for Cleveland Parks Lawn Grass Seed. Lb., 45 cts.; bus. (16 lbs.), \$6.50.

Our Lawn Grass Seeds are too well known to require any further detail of description, except to say that many of the finest lawns and parks of this city and nearby towns were seeded down with our Lawn Grass Seeds. We also make cheaper grades.

## GRASS SEEDS—Continued

## OTHER GRASS SEEDS

**Kentucky Blue.** Also called "June Grass;" an early grass of much value; will do well upon any ordinary soil; stands the heat of summer remarkably well. For pastures and lawns it has no superior, giving that peculiar, rich shade of bluish green so much admired in the best lawns; also making a very close, velvety turf. It is usually sown mixed with other fine grasses; when used alone, 40 to 50 lbs. per acre. Blossoms in June, can be sown by itself either in spring or fall. Bu. (14 lbs.).

**Grass Mixture for Golf Links.** This mixture of grass seed is giving the best of satisfaction, being composed in proper proportions of the hardy and dense growing kinds best adapted for the purpose, standing heat and drought well and of deep rooting varieties which stand wear and tear. Bu. (20 lbs.).

**Grass Mixture for Permanent Pastures.** To get a really good pasture that will last for many years it is necessary to sow grasses that will form a close, heavy turf and such as are not injured by close cropping and tramping of the animals. There are many grasses of this kind. Some start early in the spring and others continue growing late in the fall, so a considerable number of different kinds should be used. With this thought in view we have made a mixture best suited to make a permanent growth calculated to give a crop of hay if so desired or a good pasture. Sow 2½ to 3 bushels per acre. Bu. (20 lbs.).

**Herd or Red Top Grass.** A permanent and very hardy native perennial grass, succeeding best on moist land, making a good pasture when fed close; is valuable for low, wet meadows, producing large crops of good hay. It accommodates itself to a variety of soils, however, even to quite dry situations, and stands our hot climate admirably. It is perhaps, the most permanent grass we have. It remains green for the greater part of the year; sown with Timothy and Red Clover, its stems form a very close matting turf, not affected by trampling, and of fair quality when not allowed to go to seed. Sow 1½ to 2 bushels per acre.

**Hard or Red Top, Unhulled.** 14 lbs. per bus.  
**Fancy Cleaned Herd, or Red Top.** 32 lbs. per bus.

**Wood Meadow Grass.** Grows from one and one-half to two feet high; has a perennial creeping root and an erect, slender, smooth stem. Well adapted to shaded situations, such as orchards and parks. Sow about thirty pounds per acre. Bus. (14 lbs.)

**Sweet Vernal, True Perennial.** Valuable on account of its early growth; it is very fragrant and imparts an exceedingly pleasant odor when mixed with the other grasses and used for hay. Used in making mixtures of other grasses.

**Creeping Bent.** One of the most valuable lawn grasses because of its short growth and deep green, fine-leaved foliage. Its stoloniferous roots form a strong, close, enduring turf, which is not injured by being frequently walked on. Sow 2 bushels to the acre. Bus. (20 lbs.).

**Creeping or Red Fescue (*Festuca Rubra*).** Resists extreme drought, thrives on inferior soils, gravelly banks and exposed hill. 25 lbs. to acre.

**Hard Fescue (*Festuca durinscula*).** An excellent pasturage or lawn grass, succeeding well in dry or shady locations. About 12 lbs. to the bushel; 2½ bushels to the acre. Bus. (12 lbs.)

**Crested Dogstail.** A valuable addition for lawn grasses which require close cutting and an ability to resist tramping, as in golf links, etc. 21 lbs. to the legal bushel; 1 to 2 bushels to the acre. Bus. (21 lbs.)

**Orchard Grass.** This grass stands the drouth, and grows well in the shade, does well in wet or poor ground; produces large crops of hay and affords excellent pasture for stock, 14 pounds to the bushel. Sow 20 to 25 pounds to acre. Bu. (14 lbs.)

**English Perennial Rye Grass.** A desirable grass for pasture. It forms a heavy close sod and grows up quickly after being eaten or cut off. Bus. (24 lbs.)

**Italian Rye.** This is distinct from the preceding, being of much larger and stronger growth, with large broad glossy-green blades. It succeeds best in moist, fertile soils. About 20 lbs. to the bushel; 3 bushels to the acre. Bus. (20 lbs.)

**Timothy.** This crop is cut for hay; probably surpasses any other grass in cultivation; it thrives best on moist, loamy soils, and is not well suited to light, sandy or gravelly soils; it should be cut just when the blossom falls. Sow either in spring or fall, at the rate of 12 lbs. per acre, if alone, but less if mixed with other grasses. Bus. (45 lbs.).

**Sudan Grass.** A wonderful drought-resisting grass for the Southwest, becoming popular in all sections. It much resembles the Johnson Grass. It is not a perennial and does not spread from the roots and become a pest. Sudan is an unusual grass and must be reseeded every year. The plants under favorable weather conditions grow to a height of 6 to 10 feet, but when broadcasted thickly it grows only 3 to 5 feet high. It frequently produces 20 or more stalks to a plant. The stems are unbranched, seldom larger than a lead-pencil and are covered with an abundance of leaves. Is easily cured, making hay of excellent quality, which is readily eaten by all kinds of stock without injury to them. If sown by June 1st three crops of hay can be cut before frost. This grass may be grown in rows 30 inches apart, to permit easy cultivation, using 3 to 5 pounds of seed per acre, or it can be sown by drilling or broadcasting, using 15 to 20 pounds of seed per acre.

**Hungarian Millet.** An annual forage plant, early and productive, growing 2 to 3 feet high, with an abundance of foliage, often yielding 2 to 3 tons per acre. Sow 1 bus. to the acre. Bus. (48 lbs.)

**Golden or German Millet.** This is the favorite variety for planting in good land to produce a large crop of hay or forage during the summer months; of very strong growth. 50 lbs. to the bushel; 1 bushel to the acre. Tennessee grown. Bus. (50 lbs.)

**Japanese Barnyard Millet.** Enormously productive, yielding from four to six tons of cured forage per acre, on rich soils. Six to eight feet in height. Sow in May. Broadcast, ten to fifteen pounds per acre, or in drills, eight pounds per acre. Bus. (32 lbs.)

# SELECT LIST of CHOICE FLOWER SEEDS

TABLE SHOWING THE DIFFERENT VARIETIES OF SEED, AND FOR WHAT, WHEN AND WHERE, THEY ARE BEST ADAPTED

## VINES

### For Walls, Trellises, Porches and Pergolas

Balloon Vine	Balsam Pear	Beans, various	Canary Bird Vine
Cardinal Climber	Cobaea	Cypress Vine	Dolichos
Gourds	Japanese Hop	Hyacinth Beans	Kudzu Vine
Moonflower	Morning Glory	Nasturtium, tall	Passion Flower
Sweet Peas, annual	Sweet Peas, hardy	Thunbergia	Wild Cucumber

## TRAILING PLANTS

### For Window Boxes, Hanging Baskets and Vases

Forget-me-not	Ice Plant	Linaria	Lobelia
Mimulus	Nasturtium, tall	Petunia	Portulaca
Verbena			

## LOW GROWING PLANTS FOR BORDERS AND EDGINGS

Ageratum	Alyssum, white	Alyssum, hardy	Begonia
Bellis	Campanula Carpatica	Candytuft	Carnation
Coleus	Daisy	Dianthus	Eschscholtzia
Feverfew	Forget-me-not	Four O'Clocks	Godetia
Golden Feather	Gomphrena	Heuchera	Kochia
Lobelia	Marigold, dwarf	Nasturtium, dwarf	Pansies
Petunia	Phlox	Poppies	Polyanthus
Salvia	Torenia	Verbenas	Viola Cornuta
Zinnias, dwarf			

## PLANTS FOR THE SHADE

Aconitum	Aquilegia	Coreopsis Lanceolata	Daisies
Forget-me-not	Four O'clocks	Gaillardia Grdf.	Kudzu Vine
Mimulus	Nemophila	Pansies	Petunia
Wild Cucumber			

## PLANTS FOR GREENHOUSE AND CONSERVATORY

Begonia	Calceolaria	Carnation, Chabud	Coleus
Cineraria	Cyclamen	Geranium	Gloxinia
Heliotrope	Passion Vine	Primulas	Schizanthus
Viola Odorata	Sweet Peas	Torenia	Verbena, Lemon

## PLANTS WITH ORNAMENTAL FOLIAGE

Amaranthus	Begonia	Canna	Centaurea
Coleus	Eschscholtzia	Euphorbia	Ice Plant
Kochia	Linaria		Ricinus

## EVERLASTING FLOWERS

Acroclinium	Ammobium	Elichrysum	Gomphrena
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## THE MOST USEFUL FLOWERS FOR BOUQUETS

Achillea	Aconitum	Acroclinium	Ageratum
Ammobium	Anchusa	Antirrhinum	Arctotis
Aquilegia	Asters	Balsam	Calendula
Candytuft	Campanula	Carnation	Cleome
Chrysanthemum	Coreopsis	Cosmos	Dahlia
Daisy, Shasta	Dianthus	Dimorphotheca	Elichrysum
Feverfew	Gaillardia	Geranium	Gomphrena
Gypsophila	Heliotrope	Heuchera	Larkspur
Lupin	Marigold	Mignonette	Nasturtium
Nigella	Pansy	Pentstemon	Petunia
Phlox	Physostegia	Poppy	Pyrethrum
Rudbeckia	Salvia	Salpiglossis	Scabiosa
Schizanthus	Stocks	Sunflower	Sweet Peas
Sweet Sultans	Sweet William	Valeriana	Verbena
Vinca	Wallflower	Zinnia	

## HARDY PERENNIALS

Achillea	Aconitum	Alyssum Saxatile	Anchusa
Aquilegia	Chrysanthemum	Campanula	Candytuft, hardy
Carnation	Foxglove	Coreopsis	Daisy
Forget-me-not	Hollyhocks	Gaillardia	Gypsophila
Heuchera	Oenothera	Kudzu Vine	Larkspur
Lupin	Polyanthus	Pentstemon	Phlox
Physostegia	Sweet Peas	Poppy	Pyrethrum
Rudbeckia	Wild Cucumber	Sweet William	Valeriana
Viola Cornuta			

### Flower Seeds—Continued

In this list we describe the leading flowers grown from seed. The varieties are arranged alphabetically, principally under the scientific name, but in some cases by the popular or common name. Our flower seeds are of the very best quality; many are grown for us under contract by the best growers in America, while foreign-grown varieties are of our own importation direct from the most reliable growers in Europe, who, on account of their integrity, special facilities and location, are able to produce the different varieties to their greatest perfection.

All flowers raised from seed are known as Annuals, Biennials, and Perennials. Each of these classes is again divided into two classes, viz., the hardy and half-hardy, or tender kinds. Annuals are those plants which flower, or ripen their seeds or fruits the season they are sown, and then perish.

**Hardy Annuals** require no artificial heat at any period of their growth; every stage of their development, from germination to ripening of the seed, being passed in the open ground. They are the most easily cultivated of all plants.

**Half-Hardy Annuals** flower and ripen their seeds in the open air, but need the assistance of artificial heat in the earlier stages of their growth.

**Biennials** are those plants that grow from seed one year, bloom and die the next, though some varieties bloom the first season if sown early.

**Hardy Biennials** can remain in the open ground all winter; they require no protection.

**Half-Hardy Biennials** require protection and should be started in the frame or cool house and transferred to the open ground in Spring after danger from frost.

**Perennials** are those plants which last for several years, flowering annually after the first season. Some varieties bloom the first season if started early.

**Half-Hardy Perennials** require to be well protected, some varieties requiring such protection as is afforded by a greenhouse or dry cellar.

The letter 'A' following variety indicates Annuals; "B," the Biennials; "P," the Perennials; "P.A.," those Perennials which can be treated as Annuals.

#### ACHILLEA (Milford or Yarrow)

**The Pearl, "P. A."** A very pretty, hardy flower, pure white; grows two feet high, bearing from spring till frost clusters of small double flowers; fine for cutting. Pkt., 10 cts.

#### AGERATUM



#### AGERATUM (H. A.)

One of the very best bedding plants, being a mass of bloom from early summer till frost. Its flowers, unlike many bedding plants, are not liable to be spoiled by rain, nor do its colors fade out.

**Little Dorrit.** Azure blue, 8 in.  $\frac{1}{4}$  oz., 35 cts.; pkt., 10 cts.

**Mexicanum album grandiflorum.** Large white.  $1\frac{1}{2}$  feet.  $\frac{1}{4}$  oz., 20 cts.; pkt., 5 cts.

**Blue Perfection.** Deep blue. 1 foot.  $\frac{1}{4}$  oz., 50 cts.; pkt., 10 cts.

#### ALYSSUM (Mad Wort) (A)

An ever-popular border flower, requires least care of all flowers, will bloom in six weeks from planting of seed.

For edges of beds or rockeries its color effect is fine.

**Little Gem.** Very dwarf habit, 4 inches high, very erect. Oz., 80 cts.;  $\frac{1}{4}$  oz., 30 cts.; pkt., 5 cts.

**Benthani.** Grows 12 inches high; excellent for flower baskets, porch boxes Oz., 40 cts.;  $\frac{1}{4}$  oz., 15 cts.; pkt., 5 cts.

**Little Dorrit (Carpet of Snow).** The plants, which are only a few inches high, grow so dense and are so completely covered with snow-white blossoms they create the impression of a beautiful snow-white carpet. Oz., \$1.00;  $\frac{1}{2}$  oz., 50 cts.;  $\frac{1}{4}$  oz., 30 cts.; pkt., 5 cts.

#### AMARANTHUS

Well known annuals; very ornamental, of rapid growth and easy culture.

**Amaranthus, Caudatus.** (Love-lies-bleeding.)

Long, dark red; drooping flower spikes. Oz., 20 cts.; pkt., 5 cts.

**Tricolor.** (Joseph's Coat.) Beautiful show plants for Summer bedding, growing two to three feet high. Leaves red, yellow and green. Oz., 85 cts.; pkt., 10 cts.

#### ASPARAGUS

**Plumosus Nanus.** 100 seeds, 50 cts.; 1,000 seeds, \$4.50.

**Sprengeri.** 100 seeds, 15 cts.; 1,000 seeds, \$1.00.



Sweet Alyssum

**ANTIRRHINUM****Snap Dragon**

The Antirrhinum is an old favorite border plant, with dark and glossy leaves, and large curiously-shaped flowers with finely marked throats. Blossoms the first season from seed sown in the Spring, but the blossom will be much stronger the second season. Succeeds best in dry, loamy soil. Tender perennial, one and one-half or two feet high.

**Major.** (Botzum's Choicest.) Best mixed. Oz., 75 cts.; pkt., 10 cts.

**Minor.** Best mixed. Oz., 85 cts.; pkt., 10 cts.

**Nanus.** Best mixed. Oz., 85 cts.; Pkt., 10 cts.

**AQUILEGIA—Columbine**

Hardy perennial plants, growing from one and one-half to three feet high, bearing in profusion large drooping flowers of novel shape and great variety of colors. Very ornamental and among the best of hardy border plants. May be propagated by dividing the roots.

**Aquilegia, Vulgaris, fl. pl.** Double varieties, mixed. Oz., 50 cts.; pkt., 5 cts.

**ASTERS**

One of the most popular and effective of our garden favorites, producing flowers in profusion in which richness and variety of colors are combined with the most perfect and beautiful forms, and are indispensable in every garden, or pleasure-ground. As a cut flower it rivals the Chrysanthemum in beauty and diversity of form and color, and remains firm and fresh for days. They are easily grown, very hardy, and offer themselves for use at a time when other garden favorites are gone. They delight in a rich, light soil; and in hot, dry weather should be mulched with rotted manure and well watered, which will increase their beauty and duration of flowers.

**GIANT LATE BRANCHING ASTERS.**

Flowers are immense; borne on long, stiff stems.

The colors are clear and attractive and considered the most valuable of all Asters for cutting or bedding

**Pure White.** Perfect in its purity.....Pkt., 10c

**Deep Crimson.** Rich and glowing.....Pkt., 10c

**Rose.** Rich, deep rose.....Pkt., 10c

**Shell Pink.** Soit and dainty.....Pkt., 10c

**Royal Purple.** Rich and deep purple...Pkt., 10c

**Azure Blue.** Deep rich lavender.....Pkt., 10c

Any of the above,  $\frac{1}{8}$  oz., 30c.....3 Pkts., 25c

**Finest Mixed.**  $\frac{1}{8}$  oz., 25c.....Pkt., 10c

**IMPROVED VICTORIA ASTERS.**

The most beautiful and perfect of all Asters for bed or border when an even growth and a mass of flowers are wanted for effect. The flowers are very large and double clear to the center, bloom from early August until late October.

**Pink Daybreak.** Soft shell pink.....Pkt., 15c

**Purity Daybreak.** Snow white.....Pkt., 15c

**Lavender Daybreak** .....Pkt., 15c

**Rose Pink.** Rose shading to pink.....Pkt., 15c

**Azorea.** Rich deep lavender blue.....Pkt., 15c

**Salmon-Pink.** A pleasing shade.....Pkt., 15c

**Collection** of a packet each of the six colors, 60c;  $\frac{1}{8}$  oz., 50c;  $\frac{1}{4}$  oz., 80c.

**Choicest Mixed.**  $\frac{1}{8}$  oz., 40c.....Pkt., 10c

**KING ASTERS.** A distinct type of recent development. The plants are tall and the stems exceptionally strong. The massive double flowers

**Crimson King.** Brilliant color.....Pkt., 10c

**Lavender King.** Lavender blue.....Pkt., 10c

**Pink King.** Rich soft pink.....Pkt., 10c

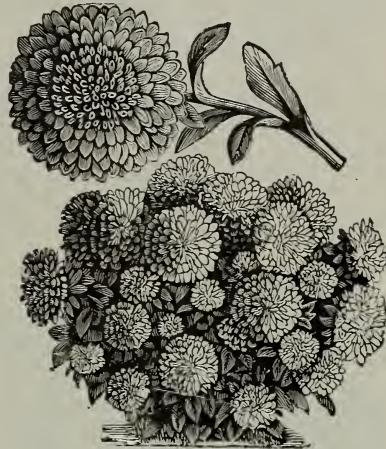
**White King.** Pure white.....Pkt., 10c

Any of the above,  $\frac{1}{8}$  oz., 30c.....3 Pkts., 25c

**Rose King.** Brilliant rose.....Pkt., 10c

**Violet King.** Rich purple violet.....Pkt., 10c

**Mixed.** All the colors,  $\frac{1}{8}$  oz., 25c.....Pkt., 10c



American Branching

**GIANT COMET ASTERS.** Flowers of extraordinary size and beauty.

**Mixed.** All colors.  $\frac{1}{8}$  oz., 25c.....Pkt. 10c

**GIANT CREGO ASTERS.** The most beautiful of the newer type of American branching varieties. The flowers are of immense size usually measuring from four to five inches across and exceptionally graceful form with very long petals which are decidedly curled and twisted. As beautiful as the most exquisite Chrysanthemum. Keeping in good condition longer than any other Aster of this type. Also known as the Ostrich Plume because of the very attractive, light, feathery appearance.

**White.** Pure white.....Pkt., 10c

**Pink.** Shell pink.....Pkt., 10c

**Purple.** Bright purple.....Pkt., 10c

**Rose.** Rose pink.....Pkt., 10c

**Lavender.** Deep Lavender.....Pkt., 10c

**Azure Blue.** Beautiful.....Pkt., 10c

**Crimson.** A rich color.....Pkt., 10c

Any of the above,  $\frac{1}{8}$  oz., 30c.....3 Pkts., 25c

**Mixed Colors.**  $\frac{1}{4}$  oz., 50c.....Pkt., 10c

**QUEEN OF THE MARKET ASTERS.** The best early Aster, producing large flowers very early in the season. Flowers are of good sizes; borne on long stems; making them very valuable for cutting.

**Bright Rose.** A rich color.....Pkt., 5c

**Lavender.** Fine for bunching.....Pkt., 5c

**Crimson.** A brilliant crimson.....Pkt., 5c

**Blush Pink.** An attractive shade.....Pkt., 5c

**Purple.** Rich deep purple.....Pkt., 5c

**White.** Snow white.....Pkt., 5c

Any of the above,  $\frac{1}{8}$  oz., 30 cts.; oz., \$1.00

**Mixed Colors.**  $\frac{1}{4}$  oz., 25c.; oz., 75c.....Pkt., 5c

**AURICULA—See Primula Auricula****BACHELOR'S BUTTON**

A name sometimes applied to *Centaurea Cyanus*.

**BELLIS—Double Daisy**

Splendid plants for early spring and summer, flowering in cool, shady places; admirably adapted for edging, borders and low beds, and also suitable for growing in pots. They are easily raised from seed and bloom the first season if started early in the house.



Bellis

**Longfellow.** Large double dark rose. Oz., \$4.00; pkt., 10 cts.

**Snowball.** Large double white flowers. Oz., \$4.00; pkt., 10 cts.

**Double Mixed.** Choice. Oz., \$2.50; pkt., 10 cts.

**BALSAM—Impatiens Balsamina**

Lady Slipper. Touch-me-not.



Balsam Double

One of the most beautiful of popular summer blooming annuals, forms a showy, bush-like plant 1½ to 2 feet high, profusely covered with large double flowers of bright colors.

**Double Rose Flowered.** An excellent strain, many of the flowers approaching the perfection of the rose in shape and fullness. Pure White, oz., 60 cts.; pkt., 10 cts. Splendid Mixture, oz., 50 cts.; pkt., 10 cts

**Balsam Camellia Flowered.** Fine mixture of double varieties. Oz., 50 cts.; pkt., 10 cts.

**CALLISTEPHUS CHINENSIS**

See Aster

**CANARY BIRD VINE**

*Tropaeolum Canariense*

A rapid growing summer climbing annual, growing 10 to 15 feet high. It will cover trellis work in the most graceful manner, producing hundreds of its pretty fringed bright yellow flowers, which resemble a canary bird with expanded wings. Oz., 40 cts.; pkt., 5 cts.



Calceolaria Perfect Model

**CALENDULA—Pot Marigold**

Showy, free flowering, hardy annuals, growing in any good garden soil, producing a fine effect in beds or mixed borders, and continuing in bloom until killed by frost; valuable also for pot culture, blooming freely in winter and early spring; one foot high.

**Calendula, Meteor.** Large double yellow striped with orange. Oz., 25 cts.; pkt., 10 cts.

**Mixed.** Fine mixture or double varieties. Oz., 50 cts.; pkt., 10 cts.

**CALCEOLARIA**

An ornamental plant, producing a mass of beautiful pocket-like flowers early in spring, and a universal favorite for the greenhouse or conservatory. Greenhouse perennial; seed should be sown in July or August.

**Calceolaria Perfect Model.** Large heads, of very large flower, well rounded and filled out in the richest and most delicate colors; a marvelous variety of shades and markings. Self-spotted, blotched and striped.

**CALIFORNIA POPPY**

See *Escholtzia*  
*Calliopsis* or *Coreopsis*

Very hardy and showy annual with bright yellow and reddish brown single daisy-like flowers, easily grown and useful both for garden decoration and cutting.

**Blood Red "A."** Oz. 20 cts.; pkt., 5 cts.

**Golden Wave.** Large yellow flowers with dark brown centers, "A." Oz., 20 cts.; pkt., 5 cts.

**Mixed.** Yellow and brown and velvety brown. Oz., 20 cts.; pkt., 5 cts.

**Perennial Coreopsis Lanceolata.** Perpetual Golden Coreopsis, free blooming, lasting throughout the summer and fall. Fine for cutting. Oz., 25 cts.; pkt., 5 cts.

## CAMPANULA or CANTERBURY .. BELLS

This old-fashioned flower is a favorite with all. Stately and showy, and of the easiest growth. Hardy biennials.

**Single, Mixed Colors.** The old-fashioned variety with single bell-shaped flowers.  $\frac{1}{4}$  oz., 20 cts.; pkt., 5 cts.

**Calycanthema "Cup and Saucer."** Our mixture includes all the best colors and varieties.  $\frac{1}{4}$  oz., 50 cts.; pkt., 10 cts.

**Pyramidalis.** The Chimney Bell-flower, a hardy perennial flowering in late summer. Finest mixed. Height,  $3\frac{1}{2}$  feet.  $\frac{1}{4}$  oz., 50 cts.; pkt., 10 cts.



## CANDYTUFT ROCKET

Candytuft (A)

Candytuft is a very hardy plant, easily grown and flowers all summer. It is a universal favorite, and is used for beds, borders, pots, etc.

**Giant Empress.** An improved variety producing very long spikes of bloom resembling a white hyacinth. This is certainly the finest white candytuft. Oz., 50 cts.;  $\frac{1}{4}$  oz., 15 cts.; pkt., 5 cts.

**Pink.** Oz., 25 cts.;  $\frac{1}{4}$  oz., 10 cts.; pkt., 5 cts.

**Crimson.** Oz., 25 cts.;  $\frac{1}{4}$  oz., 10 cts.; pkt., 5 cts.

**Purple.** Deep, rich purple. Oz., 25 cts.;  $\frac{1}{4}$  oz., 10 cts.; pkt., 5 cts.

**Dwarf Empress.** White, large and showy spikes; fine for forcing. Oz., 50 cts.;  $\frac{1}{4}$  oz., 15 cts.; pkt., 5 cts.

**Mixed Colors.** A mixture of the pink, purple, crimson and white varieties. Oz., 25 cts.;  $\frac{1}{4}$  oz., 10 cts.; pkt., 5 cts.

## CASTOR OIL PLANT—Ricinum



Castor Oil Plant

A very ornamental, strong growing plant with leaves of green, brown or bronzed metallic hue,

and long spikes of prickly capsules of scarlet and green. An elegant plant for a lawn or as center plant of groups of Cannas, Dahlias, etc. Half-hardy annual, six to ten feet high.

**Castor Oil Plant, Zanzibariensis.** An entirely distinct new sort, with enormous leaves, measuring two to two and one-half feet across, and in different plants ranging from light green to deep bronze. Exceedingly striking and beautiful. Oz., 25 cts.; ptk., 5 cts.

**Castor Oil Plant.** Mixed varieties. Oz., 25 cts.; ptk., 5 cts.

## CARNATION—Dianthus Caryophyllus

A universal favorite; one of the most esteemed flowers of the florists' collection, and indispensable in every collection of conservatory or house plants, while for open ground culture it is very desirable. It is not surpassed in elegance, beauty or fragrance by any other flower. The flowers are borne on long stems, rendering them excellent for cut flowers. Half-hardy perennials. One to one and one-half feet high.



**Carnation Double Perpetual**  
**Carnation, Double Perpetual.** This new carnation was raised by a famous French specialist who claims it to be the best of his introduction. Handsome double flowers are produced in great profusion, in every variety of color, on vertical, straight, stalky flower stems. Blooms in about seven months from sowing of seed and continues to flower indefinitely. It will be found invaluable for florists and amateurs. Seed can be sown either in autumn or early spring. Per oz., \$2.00.; ptk., 5 cts.

**Carnation, Extra Choice, Double.** A very fine strain, mixed. Per oz., \$2.00; ptk., 5 cts.

## CARDINAL CLIMBER (A)

One of the best annual climbers introduced for many years. Rapid grower, with branching habit; flowers all summer in fiery cardinal-red clusters; 25 feet. Pkt., 25c; oz., \$1.80.



### CARNATION—Continued

A magnificent class of Carnations that will bloom in four months after sowing of the seed. The flowers are of brilliant colors, ranging through many beautiful shades of reds, pinks, white, variegated, etc. They are of perfect form and large size, and what is of special value, the calyx never bursts. Those sown in spring commence flowering in early summer and continue to bloom most abundantly until checked by frost. They can be potted and taken into the house and will flower through the winter. The plants are dwarf, much branched, compact and robust in habit, consequently supporting themselves. The seed we offer is an improved strain of the semi-dwarf class, which is most valuable.

**Giant Marguerite.** A much improved class, both in size of flower and doubleness, yielding a rich display of colors. Oz., \$1.75; pkt., 10 cts.

### CELOSIA or COCKSCOMB

Free blooming annuals, growing best in rather light soil, not too rich, producing ornamental comb-shaped flowers; make grand border plants and are attractive for pots. Half-hardy.

**Dwarf.** Choice colors, mixed. Oz., \$2.00; pkt., 10 cts.

### CENTAUREA Flowering Varieties

**Centaurea, Cyanus.** (Ragged Sailor, Corn Flower, Blue Bottle.) Sometimes called Bachelor's Button. A perfectly hardy border plant, thriving finely in any common garden soil, but the flowers are more brilliant if grown in gravelly ground. Under cultivation it is really a handsome flower, sprouting its varieties of white, purple, pink, parti-colored,

etc. Hardy annual, two to three feet high. Oz., 20 cts.; pkt., 5 cts.

**Emperor William.** A fine, dark blue variety. Oz., 40 cts.; pkt., 5 cts.

**Imperialis.** Mixed, a new, large-flowered hardy class; flowers of various colors; fine for cutting. Oz., \$1.00; pkt., 5 cts.

**Giant Flowering Sweet Sultans.** Very large, sweet-scented flowers; may be described as gigantic corn-flowers and are of same easy culture, succeeding everywhere.

**Centaurea Candidissima.** (Dusty Miller.) A valuable ornamental leaved plant, forming a graceful round bush of silvery gray, fern-like leaves, making a fine contrast when massed with dark foliage plants. Half-hardy perennials, one and one-half feet high. Per oz., 60 cts.; pkt. 5 cts.

**Moschata Atroperpurea.** (Sweet Sultan.) Mixed in best colors. Per oz., 50cts.; pkt., 5 cts.

### CHrysanthemum



Chrysanthemum,  
Mixed Annual

Showy and effective garden favorites, exclusively grown for cut flowers. They produce on long stems beautiful large flowers of many bright colors.

### Single Annual Sorts

Showy, free-blooming plants of thrifty habit, 12 to 13 inches high. Hardy annuals.

**Carinatum.** Fine mixed single. Oz., 50 cts.; pkt., 5 cts.

**Frutescens.** Paris Daisy, or "Marguerite." The finest of the white "Daisies." Produces its pretty, white, star-shaped flowers in great abundance. Popular with florists; valuable for cutting. Succeeds well in any garden soil; two and one-half feet high. Oz., \$1.00; pkt., 10 cts.

### Double Annual Sorts

Hardy garden plants one and one-half to two feet high, blooming plentifully throughout the summer and until frost.

**Coronarium, fl. pl.** Double, mixed. Oz., 30 cts.; pkt. 10 cts.

### Perennial Varieties

These are the popular fall flowering Chrysanthemums that attract so much attention at the Autumn shows. Plants raised from seed bloom the first year is sown early.

**CHRYSANTHEMUM—Continued**

**Shasta Daisy.** A general mixture saved from a large number of extra choice hybrids, and certain to produce a large number of varieties of great merit. Per oz., \$1.00; pkt., 10 cts.

**CIGAR PLANT**  
See *Cuphea Platycentra*

**CINERARIA**  
Flowering Varieties

One of the most ornamental and useful greenhouse flowering plants. Has large, handsome flowers measuring two to three inches in diameter, the colors being distinct and richly diversified. Greenhouse perennial.

**Cineraria Hybrida Grandiflora.** Large flowered semi-dwarf prize, splendid strain, mixed, 1/16 oz., \$10.00; 1/32 oz., \$5.50.



Cineraria Hybrida Grandiflora

**CLARKIA**

Very pretty free flowering annuals for flower beds. The flowers are very showy and of many colors; one and one-half feet high.



Clarkia, Single and Double Varieties

**Clarkia, Elegans.** Single and double, fine mixed. Oz., 50 cts.; pkt., 10 cts.

**COBaea**



Cobaea Scandens

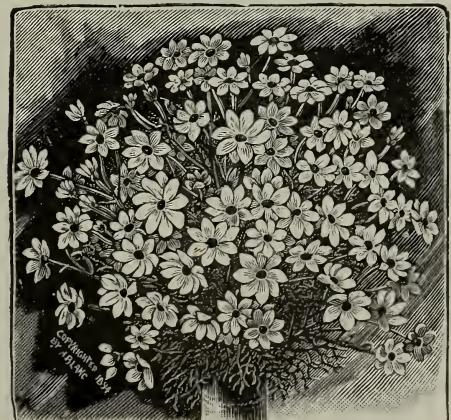
A rapid growing climber, attaining a height of 20 to 30 feet in a season. Can be grown in the garden in Summer and in the greenhouse or conservatory in the winter. Bears large, bell-shaped flowers which are produced in great profusion. Half-hardy perennial.

**Cobaea Scandens, Alba.** Oz., \$1.25; pkt., 5 cts. Mixed. Oz., \$1.00; pkt., 5 cts.

**COREOPSIS**

**Coreopsis Grandiflora.** The flowers of this much improved variety are much larger and more beautiful than any other offered; bright yellow on long stems; keep fresh in water for a week or ten days. Oz., 50 cts.; pkt., 5 cts.

**Coreopsis Lanceolata.** One of the finest of hardy plants; very large, golden yellow flowers; excellent for cutting; will thrive in almost any situation. Oz., 50 cts.; pkt., 5 cts.



Cosmos, Large Flowering

**COSMOS**

A showy, Autumn flowering plant, with elegant foliage, of very strong growth, and considered of great value for cutting. The plants grow

**COSMOS—Continued**

from six to eight feet high, and in blooming season are covered with hundreds of blossoms two and three inches in diameter and resemble single Dahlias. A quite hardy annual.

**Cosmos, Giant Early Flowering Fancy.** The flowers of this superb new strain are of immense size, measuring four to five inches in diameter, and are produced in great diversity of form and coloring; the colors range from pure white through shades of pink, deep rose and crimson to light red. Mixed. Per oz., 40 cts.; pkt., 5 cts.

**Dwarf Early Flowering Hybrids.** Mixed. This new variety comes into flower in July, and continues a mass of bloom until cut down by severe frost; more bushy and compact than the older varieties, growing only four feet high, while all others attain a height of six to seven feet. The flowers are fully as large as those of the old sort; the colors are beautiful white, pink and crimson. Oz., 40 cts.; pkt., 5 cts.

**Mammoth Perfection.** A vast improvement over the old sort; flowers are of mammoth size, the petals being broad and overlapping form a perfectly round flower. A magnificent strain, representing the highest development in Cosmos to date.

White, per oz., 60 cts.; pkt., 5 cts.

Pink, per oz., 60 cts.; pkt., 5 cts.

Crimson, per oz., 60 cts.

Mixed, per oz., 40 cts.

**CORN FLOWER**

See *Centaurea Cyanus*

**COLUMBINE—See *Aquilegia*****CONVOLVULUS, MAJOR**  
See *Morning Glory***CUCURBITA—See Gourds**  
**CUPHEA**

**Cuphea, Platycntra.** (Cigar Plant.) A most interesting plant, useful for bedding purposes and for house culture. Forms a dwarf, compact bush about 12 inches high and bears a profusion of vermillion tube-shaped blossoms with black lower lip and edged with white on the top. Half-hardy annual. 1/8 oz., \$1.00; 1/32 oz., 35 cts.

**CYPRESS VINE—Ipomoea Quamoclit**

A most beautiful climber, with delicate, dark green, feathery foliage, and an abundance of bright star-shaped, rose, scarlet and white blossoms, which in the bright sunshine present a mass of beauty. Planted by the side of a veranda,

tree or stakes, and trained properly, there is nothing prettier. Tender annual; fifteen feet high.

**Cypress Vine.** Scarlet. Per oz., 50 cts.; pkt., 5 cts.

**Cypress Vine.** White. Per oz., 50 cts.; pkt., 5 cts.

**Cypress Vine.** Mixed. Per oz., 50 cts.; pkt., 5 cts.

**CYCLAMEN**

Beautiful Winter and Spring flowering tuberous-rooted plants for pot culture in conservatory or greenhouse; bearing large handsome flowers in a variety of bright colors. Tender perennial.



Cyclamen Persicum

**Cyclamen Persicum.** An extra choice strain saved from very large flowers of rich and varied colors. Finest mixed.

**Botzum's Prize Strain.** Finest in existence. 1/4 oz., \$3.75; 1/8 oz., \$2.00.

**Grandiflora Elba.** Fine white.

**King Edward VII.** Fine crimson.

**Salmon.** New, very pretty.

**White.** With purple base.

**Salmon King.** Extra large, beautiful links.

**Rosia.** Very fine.

**Lilacina.** New lilac.

**Rosy Morn.** Delicate rose tinted, claret base.

**Peach Blossom.** New, fine.

**Pink Queen.** Beautiful pink.

**Purple King.** Rich purple.

**Charming Bride.** Very good.

**DAISY—See *Bellis***

**DATURA**

**Datura, Cornucopia.** A highly interesting novelty, forming a good sized bush-like plant in a single season. The flowers are composed of three funnel-shaped tubes, growing each within the other, the throat and mouth of each tube being a delicate white and the outside a



Datura Cornucopia

mottled purple. The flowers are eight to ten inches in length and five to seven inches across the mouth. This novelty is of easy culture, does splendidly in the open ground; may be grown as single specimen, in groups, or among shrubbery. Oz., 50 cts.; pkt., 10 cts.

**DELPHINIUM—Hardy Larkspur**

Very ornamental, free flowering perennials, with splendid flowers and curiously cut leaves. Indispensable for permanent beds and borders.

**Delphinium Formosum.** Flowers deep blue with white center, in tall, much crowded spikes; two to three feet high. Per oz., \$1.25; pkt., 10 cts.

**Nudicaule.** Compact and abundant bloomer with large, scarlet flowers; one and one-half feet high. Per oz., \$3.00; pkt., 25 cts.

**Delphinium.** Choice show seed saved from choice named varieties. Pkt., 25 cts.

**DIANTHUS—Pinks**

The family of Dianthus is by far the most useful of all the biennials and perennials, and for beauty and variety cannot be surpassed. The delicacy and richness of the tints, combined with the aromatic fragrance of many of the species, are valuable recommendations for the entire family.

**Dianthus, Chinensis, fl. pl.** Double China Pink; a biennial of dwarf habit; flowers the first year, but the bloom is stronger the second. Finest double mixture, per oz., 50 cts.; pkt., 10 cts.

**Heddewigii.** Finest single mixed; flowers deeply fringed or feathered; broad and round

and of exquisite colors. Half-hardy annual. Per oz., 50 cts.; pkt., 10 cts.

**Heddewigii, Hybridus, fl. pl.** Double Japan Pink; flowers very large and double, two to three inches in diameter and of many brilliant colors. Half-hardy annual. Choicest mixed, per oz., \$1.25; pkt., 10 cts.



Dianthus Chineris

**DIANTHUS—Barbatus**  
See Sweet William**DIANTHUS—Caryophyllus**  
See Carnation**DIGITALIS—Fox Glove**

A handsome and highly ornamental hardy perennial plant, of stately growth; fine for shrubberies and other half-shady places; three feet high.

**Digitalis, Gloxiniaflora.** A very beautiful class with spotted flowers; all colors mixed. Oz., 75 cts.; pkt., 10 cts.

**DIMORPHOTHICA**  
African Golden Daisy

**Aurantiaca.** An extensively showy annual Daisy from South Africa, which suits our climates perfectly. Bushy plant growing 12 to 15 inches high; flowers are  $2\frac{1}{2}$  inches and over; rich, glossy orange-gold, with dark disk and halo. Sow same as Aster or Petunias in dry, sunny position. Bloom greater part of Summer and Fall. Per oz., \$1.50; pkt., 25 cts.

**Aurantiaca Hybrida.** Beautiful new Hybrids of the African Golden Daisy, similar in habit to the parent; flowers equally as large, but varying in color from pure white through the various shades of yellow and orange to rich salmon shades. Oz., \$1.25; pkt., 25 cts.

**DOLICHOS—See Hyacinth Bean**  
**DRACAENA**

Very showy foliage plant with narrow arching leaves; extensively used for centers of hanging baskets and vases, and for decoration.

**Dracaena Indivisa.** Narrow leaved. Per oz., 40 cts.; pkt., 10 cts.

**Dracaena Indivisa Lineata.** Per oz., 50 cts.; pkt., 10 cts.

### ECHINOCYSTIS Wild Cucumber Vine

*Echinocystis Lobata.* A rapid, luxuriant growing annual climber; very useful for quick effects; splendid for covering old trees, fences, etc. Per oz., 25 cts.; pkt., 5 cts.

### ESCHSCHOLTZIA

#### California Poppy

Very showy summer flowering annuals; blossoms about two inches in diameter, saucer-shaped, of many brilliant and showy colors; are produced in great profusion. Excellent for bedding or borders; also fine for pot culture. One foot high.

California. Mixed. Per oz., 20 cts., pkt., 5 cts.  
California. Mixed, double. Per oz., 75 cts.;  
pkt., 10 cts.

**EVERLASTING**—See *Helichrysum*

**FEVERFEW**—See *Matricaria*

**FORGET-ME-NOT**—See *Myosotis*

**FOUR O'CLOCK**—*Mirabilis Jalapa*

or  
**Marvel-of-Peru**



Four O'Clock

Handsome, sweet-scented free flowering plants; some varieties have beautifully variegated leaves. The flowers are funnel-shaped, white, red and striped, and open about 4 o'clock in the afternoon, remain open all night and generally perish before noon the next day. Hardy annual, two feet high.

**Four O'Clock.** White, yellow, rose, crimson, lilac, and mixed. Per lb., \$1.50; per oz., 15 cts.; pkt., 5 cts.

### GAILLARDIA

A very showy and useful class of plants; remarkable for the profusion of bloom, size and brilliancy of their flowers. Effective when grown in masses, flowering during the entire Summer and Autumn. One and one-half feet high.



*Gaillardia, Grandiflora.* Splendid new perennial varieties with large flowers, dark crimson centers, marked with rings of many different colors. Mixture. Per oz., 60 cts.; pkt., 10 cts.

*Lorenziana.* A charming, profuse double-flowered strain; beautiful mixed colors. Per oz., 50 cts.; pkt., 10 cts.

### GLOXINIA

*Hybrida Grandiflora.* An improved strain containing the spotted hybrids as well as the self-colored sorts. 1/32 oz., \$3.50.

**GOLDEN FEATHER**  
See *Pyrethrum Aureum*

**GREVILLEA ROBUSTA**—*Silk Oak*

A very beautiful and useful decorative plant, with fern-like foliage; excellent for table decoration; easily raised from seed; producing good-sized plants in a short time.

*Grevillea Robusta.* Per oz., 75 cts.; pkt., 10 cts.

### GODETIA

Beautiful garden plants of easy cultivation in any good garden soil, and remarkable for the delicacy of their very large blossoms. Hardy annual; one to one and a half feet high.



Godetia

*Godetia.* Fine mixed. Per oz., 40 cts.; pkt., 10 cts.

**GOURDS—Cucurbita**

A tribe of climbers with curiously shaped fruit in various colors. Being of rapid growth, they are fine to cover old fences, trellises, stumps, etc. The foliage is quite ornamental and the markings of some of the fruit are extraordinary. Do not plant the seed until all danger of frost is over and select rich mellow ground. Tender annual climber; 10 to 20 feet high.



Ornamental Gourds

**Gourds, Ornamental.** Mixed. Per oz., 20 cts.; pkts., 5 cts.

**GYPSOPHELA—"Baby's Breath"**

*Gypsophila* (Baby's Breath). Pretty, free-blooming elegant plants, succeeding in any garden soil. Their misty, white panicles of bloom are largely used for mixing with other cut flowers. Per oz., 25 cts.; pkts., 5 cts.

**HELICHRCSUM—Everlasting Flower**

Very showy summer-blooming annuals producing large, full double flowers of various colors, from bright yellow to scarlet, shaded and tipped. Not only handsome as garden plants, but valuable as an "everlasting" for winter bouquets. When used for this purpose the blossoms should be gathered on the point of expanding. One to two feet high.



Helichrysum

**Helichrysum, Monstrosum, fl. pl.** Large flowering double, very showy and rich mixture. Per oz., 50 cts.; pkts., 10 cts.

**HUNNEMANNIA FUMARIEFOLIA**

**Giant Yellow Tulip Poppy.** By far the best of the Poppy family for cutting, remaining in good condition for several days. Grows about 2 feet high, bushy. Blooms from July to frost if sown in May. Per oz., 60 cts.; pkts., 10 cts.

**HELIANTHUS—See Sun Flower****HELIOTROPE**

Highly valued for the fragrance of their flowers, and duration of bloom. They succeed in

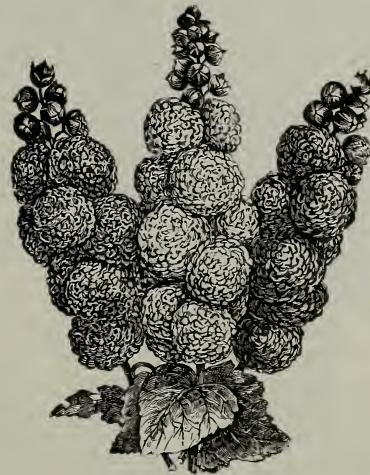
any rich, light soil, and cuttings of the shrubby kinds, taken off while young, start readily.

Start under glass. Half-hardy perennial; one foot high.

**Heliotrope.** Choice mixed. Per oz., \$1.35; pkts., 10 cts.

**HOLLYHOCK**

The Hollyhock, in its present state of perfection, is very unlike its parent of olden times. It now ranks with the Dahlia, Aster, Camellia, etc. For a background to a flower garden perhaps no plant is so useful. The flowers are as double as a rose, of many shades of color, from deep yellow, red, purple, to pure white. Hardy perennial; five feet high.



Double Hollyhock

**Double Hollyhocks.** An exceptionally choice strain of all double flowers and true to color.

Our stock is grown by a specialist of this important family of the flowery kingdom.

**Finest Mixed.** 1 oz., \$1.50;  $\frac{1}{4}$  oz., 50 cts.; pkts., 10 cts.

**Bright Rose.** 1 oz., \$1.50;  $\frac{1}{4}$  oz., 50 cts.; pkts., 10 cts.

**Flesh Color.** 1 oz., \$2.00;  $\frac{1}{4}$  oz., 75 cts.; pkts., 10 cts.

**Maroon.** 1 oz., \$1.50;  $\frac{1}{4}$  oz., 50 cts.; pkts., 10 cts.

**Red.** 1 oz., \$1.50;  $\frac{1}{4}$  oz., 75 cts.; pkts., 10 cts.

**Sulphur Yellow.** 1 oz., \$1.50;  $\frac{1}{4}$  oz., 50 cts.; pkts., 10 cts.

**White.** 1 oz., \$2.00;  $\frac{1}{4}$  oz., 75 cts.; pkts., 10 cts.

**HYACINTH BEAN**  
*Dolichos Lablab*

A rapid growing annual climber, flowering freely in clusters, followed by ornamental seed pods. For covering arbors, trellises, etc. Sow the seed in the garden in April or May, where they are to remain.

**Purple and White.** Mixed. Per oz., 20 cts.; pkts., 5 cts.

**HYACINTHUS CANDICANS**

A giant summer-flowering Hyacinth of robust growth, producing a flower stem three to four feet high, covered with 20 to 30 pure white bell-shaped flowers. Bulbs keep dry over winter, like Gladiolus. Oz., 30 cts.; ukt., 5 cts.

**HUMULUS—Japanese Hop**

*Humulus Japonicus.* A very ornamental and fast-growing climbing plant. Perfectly hardy and seeds itself after the first year. The foliage resembles that of the common hop, is very dense, and in color a lively green. One of the best plants for covering unsightly objects, verandas, trellises, etc. Per oz., 50 cts.; pkt., 10 cts.



Humulus Variegated Leaved

*Japonicus Variegated.* A variegated variety of the Japanese Hop. The leaves are beautifully and distinctly marked with silvery-white, yellowish-white and light and dark green. As with the green-leaved variety, it is never injured by insects nor affected by the heat, but retains its fresh and bright variegated foliage until late in autumn. Per oz., 50 cts.; pkt., 10 cts.

**IBERIS—Hardy Candytuft**

*Sempervirens.* A profuse white-flowering, hardy perennial, coming in flower early in the Spring; much used for cemeteries, rockeries, etc. One foot. Per oz., \$2.50; pkt., 10 cts.

**ICE PLANT—Mesembryanthemum**

Handsome and curious plant for hanging baskets, rock work, vases and edgings. The leaves and stems are succulent and fleshy and look like rock candy. The whole plant is peculiarly brilliant in the sunshine. The flower is white and not conspicuous. Can be grown in pots or open border, the former having preference. Tender annual trailer; six inches high.

**Ice Plant.** (*Mesembryanthemum, Crystallinum*). Oz., 50 cts.; pkt., 10 cts.

**JOSEPH'S COAT**  
See *Amaranthus Tricolor*

*Kochia Tricophylla* (Summer Cypress, or Mexican Firebush). Pretty little bushes of pyramidal shape; foliage delicate green, the little tiny, brilliant scarlet flowers completely covering the whole plant. Excellent for hedges along walks in gardens; 3 feet. Oz., 15 cts.; pkt., 5 cts.

**JOB'S TEARS—Coix Lacryma**

Curious ornamental grass with broad cornlike leaves. Valuable for the formation of winter bouquets, in connection with everlasting flowers. The seeds are of a light slate color; strings of handsome beads may be made from them. Hardy annuals; three feet high. Per oz., 20 cts.; pkt., 5 cts.

**LARKSPUR—Delphinium**

The Larkspur is one of the handsomest and most useful of plants, and for large gardens it is invaluable. The leaves are much divided; flowers in terminal spikes. The brilliancy of some of the colors is unsurpassed. Hardy annuals.

**Larkspur, Double Dwarf Rocket.** Very free flowering species. Flowers in spikes. One foot high. Mixed. Per oz., 35 cts.; pkt., 5 cts.

**Larkspur.** Double Giant Hyacinth; flowered; finest mixed. Per oz., 35 cts.; pkt., 5 cts.

**LATHYRUS****Everlasting or Hardy Sweet Pea**

Showy, free-flowering hardy perennial climbers, for covering old stumps, fences, etc. Continually in bloom; fine for cutting.

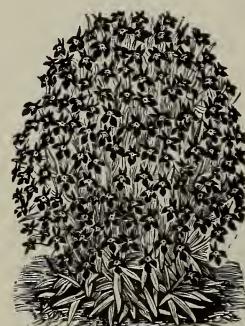
**Lathyrus, Latifolius.** Flowers white, red and rose. Mixed, per oz., 60 cts.; pkt., 10 cts.

**LAVENDER—Lavendula Spica**

A well-known sweet-scented hardy perennial, bearing long spikes of fragrant blue flowers; one to two feet high. Should be extensively grown in the mixed border. Per oz., 25 cts.; pkt., 5 cts.

**LOBELIA**

One of the most elegant and useful plants, of easy culture, and well adapted for bedding, edging, pots or rockeries. Half-hardy annuals.



Lobelia Crystal Palace

**Crystal Palace Gem.** Forms a perfect ball of snow-white flowers. Oz., \$1.50; pkt., 10 cts.

**Crystal Palace Compacta.** Rich, deep blue, dark foliage, the finest dark blue for bedding. Oz. \$2.50; pkt., 25 cts.

**Emperor William.** A very compact variety, sky blue flowers. Oz., \$2.00; pkt., 25 cts.

**Erinus Blue (Light Blue).** Fine for baskets, vases, etc.; training gracefully and blooming profusely. Six inches high. Oz., \$1.25; pkt., 10 cts.

**LOPHOSPERUM**

Highly ornamental annual climber, with showy fox-glove-like flowers. Ten feet.  
*Lophospermum Scandens.* Rosy purple. Oz., \$2.25; pkt., 10 cts.

**LUPINUS—Lupine**

Annual varieties, showy plants with handsome, conspicuous flowers, borne in terminal racemes; used extensively for bedding and fine for cutting.

Dwarf Finest Mixed. Oz., 50 cts.; pkt., 10 cts.

**LYCHNIS****Rose Campion, Jerusalem Cross**

Handsome hardy perennial plants of easy culture, for massing in beds and borders; blooming the first year if sown early.

*Chalcedonica.* Fine scarlet flowers; 2 feet. Oz., 35 cts.; pkt., 10 cts.

*Haageana.* Brilliant orange, scarlet, crimson, etc., in mixture; 1 foot. Oz., \$1.75; pkt., 10 cts.

**LOVE-LIES-BLEEDING**

See *Amaranthus Caudatus*

**MARIGOLD—Tagetes**

Old-fashioned flowers, rich and showy, blooming continually all Summer; excellent for bouquet and a beautiful garden plant. Tall African varieties best for garden and cutting, while French varieties are fine for edging. Annual. *Mammoth African Finest Mixed.* Double, 3 feet. Oz., 50 cts.; pkt., 10 cts.

*French Dwarf Double.* Finest Mixed. 2 feet. Oz., 80 cts.; pkt., 10 cts.

**MARVEL OF PERU**

*Mirabilis Jalapa*—See *Four O'Clock*

**MATRICARIA**

*Matricaria Capensis*, fl. pl. (*Feverfew*). Bushy annual garden plant, useful for bedding. Flowers much used for cutting. Double white, fine. Oz., 50 cts.; pkt., 10 cts.

**MIGNONETTE**

Mignonette, Machet

A well-known hardy annual, producing dense semi-globular heads of exceedingly fragrant flowers, borne on spikes from three to six inches long. Is in bloom nearly the whole season, and is so fragrant that the whole atmosphere around is perfumed. If sown at intervals during the spring and early summer, it will be in bloom till killed by the frost. Seeds sown in autumn will bloom early in spring. Hardy annual; perennial if protected; one foot high.

**Mignonette, Sweet Large Flowered.** (*Reseda Odorata Grandiflora.*) Per oz., 20 cts.; pkt., 5 cts.

**Machet.** (*Reseda Grandiflora.*) An entirely new and distinct sort of great merit. It is of dwarf and vigorous growth, and throws up numerous stout flower stalks, terminated by massive spikes of deliciously scented red flowers. One of the very best sorts for pot culture. Per oz., 50 cts.; pkt., 5 cts.

**MIMOSA**—See *Sensitive Plant*

**MIMULUS**

Handsome flowers of easy cultivation. Perennial in the greenhouse, annual in the open air.



**Mimulus Moschatus.** (*Musk Plant.*) Cultivated on account of the musky odor of the leaves. Per oz., \$6.00;  $\frac{1}{2}$  oz., \$1.00.

**Mimulus, Tigrinus Grandiflora.** (*Monkey Flower.*) Beautiful, large tigered and spotted flowers; blooms the first year. Per oz., \$3.50;  $\frac{1}{2}$  oz., 75 cts.

**MIRABILIS JALAPA**—*Marvel of Peru*  
See *Four O'Clock*

**MONKEY FLOWER**  
See *Mimulus Tigrinus*

**MOURNING BRIDE**  
See *Scabiosa*

**MUSK**—See *Mimulus Moschatus*  
**MYOSOTIS**—*Forget-Me-Not*

An old favorite plant, bearing clusters of star-shaped, delicate blue flowers, with white and yellow eyes. It flourishes best in a moist, shady situation, and it is in constant bloom nearly the whole season. If the seed be sown in autumn, it will succeed best and flower early in spring. Hardy perennial; six inches high.

**MYOSOTIS—Continued**

**Myosotis, Alpestris.** Blue. Per oz., 75 cts.; pkt., 10 cts.

**Victoria.** The flowers are large, bright azure blue with yellow centers. The plants are of dwarf bushy habit. A valuable variety for cut flowers. Per oz., \$1.25; pkt., 10 cts.

**Palustris.** The true Forget-Me-Not; beautiful blue flowers; 6 inches high. Per oz., \$3.50; pkt., 25 cts.

**Dissitiflora.** Of dwarf, compact habit, with sprays of large blue flowers, especially adapted for planting among spring flowering bulbs. Per oz., \$6.00; pkt., 50 cts.

**MORNING GLORY**

One of the most free flowering and rapid growing plants in cultivation. It is so hardy as to grow and thrive in almost any soil or situation.

**Morning Glory, Imperial Japanese.** A magnificent new class, with gigantic flowers measuring four to six inches across and of an endless variety of colors, running through all shades of blue and of red from palest pink to the darkest shades of red and purple; some are streaked, mottled, striped, marbled and bordered in wonderful profusion. Of the easiest culture and very rapid growth; grows in any common garden soil, attaining a height of 80 feet during the summer. Very attractive even before flowering, on account of the varied forms and markings of the foliage, some of the leaves being a dark green while others are golden and many of them marbled, margined and streaked with silvery white, green and gray.

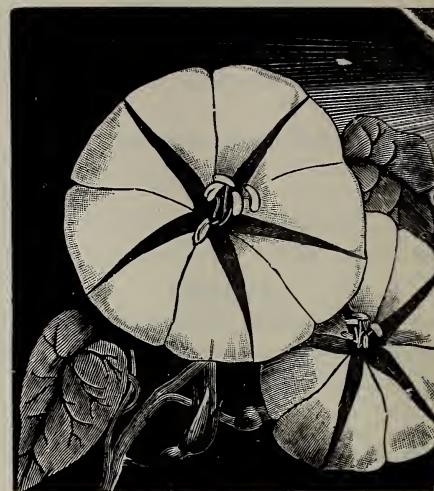
**Best Single Varieties** in fine mixture. Per lb., \$1.25; oz., 20 cts.; pkt., 5 cts.

**Single Fringed Varieties** in fine mixtures. Per lb., \$1.75; oz., 35 cts.; pkt., 10 cts.



Morning Glory

**Morning Glory.** (American.) Handsome, showy climber of easy culture, and suitable for



Moon Flower

covering arbors, windows, trellises, old stumps, etc. Ten feet high. Per lb., 80 cts.; oz., 20 cts.; pkt., 5 cts.

**Moon Flower, New Hybrid.** It makes an immense growth of vine and deep foliage, and is of great value in the North, as it is in full bloom fully one month before the old varieties. The large flowers are four to six inches in diameter and very numerous, completely covering the foliage at places. They vary in form on different plants, some being scalloped, others perfectly round, others star-shaped; the foliage also varies from the original shape to oak-leaved and heart-shaped forms. Per oz., 40 cts.; pkt., 5 cts.

**NASTURTIUM—Tropaeolum****Dwarf, Tom Thumb, or Bedding Sorts**

A bed of Dwarf Nasturtiums in the yard is very brilliant and attractive, and blooms all the season. The flowers are more brilliant if the soil be not over rich. Give each plant a foot of room. Hardy annual; one foot high.

**Dwarf.** A mixture of many fine sorts. Per oz., 15 cts.;  $\frac{1}{4}$  lb., 35 cts.; pkt., 5 cts

**Tall or Climbing Sorts**

The Tall Nasturtium is a very rapid grower, and strikes freely from cuttings, but seeds sparingly. The colors are very brilliant and of many shades from scarlet to black. Fine for covering arbors, trellises and rustic work. Hardy annual; 10 to 20 feet high.

**NASTURTIUM**

Nasturtium, Hybrids

Tall. (*Tropaeolum Majus*.) Mixture of choice varieties. Per oz., 15 cts.;  $\frac{1}{4}$  lb., 35 cts.

**NICOTIANA**

**Nicotiana Affinis.** A genus of garden plants of the tobacco family, which are noted for the freedom and fragrance of their bloom. Plants attain a height of two feet and produce an abundance of large, pure white, star-shaped flowers of delicious fragrance. If the plants are taken up in the Fall, cut back and potted, they will bloom nicely in the house during the winter. Per oz., 35 cts.; pkt., 5 cts.

**Nicotiana Sandera.** A splendid type in a great variety of colors. Per oz., 50 cts.; pkt., 10 cts.

**NIEREMBERGIA**

Graceful plants, blooming profusely the whole Summer; fine for vases, baskets, etc.

**Gracilis.** Light blue. Per oz., \$1.25; pkt., 10 cts.

**NIGELLA**

(Love-in-a-Mist, or Devil-in-the-Bush.) H. A. plant bears very showy flowers, with the foliage finely cut; form very curious, interesting plants. Miss Jekyll. Double; bright blue; excellent for cutting. Oz., 40 cts.; pkt., 5 cts.

**OXALIS**

Very pretty herbaceous plant with rich rose colored blossoms. They thrive well in a mixture of loam and sand; they should not be watered after they have done flowering until they begin to grow afresh. Are very desirable for greenhouse decoration, rock work or baskets out of doors. The plants can be wintered successfully in cold frames if they are kept dry and the frost is excluded. Half-hardy perennials. **Oxalis.** Choice mixed. Pkt., 25 cts.



Oxalis

**PANSY—Viola, Tricolor Maxima**

These lovely flowers are favorites with all, not only for the brilliancy and variety of their color, but for the durability of their bloom. Seed may be sown in open ground in spring or summer or in hot-beds early in spring. Young plants produce the largest and best flowers. The plant should always occupy a cool, partially shaded situation, and the ground cannot be too rich; coolness and moisture are necessary. Transplant when an inch high. Seed sown in July will blossom late in autumn; if sown in October will blossom the following spring. Hardy biennial, four inches high.

**"Greater Cleveland" Mixture.** The finest mixture ever offered. Contains over 65 different colors, shades and markings; beautiful, rare varieties, and new shades that can only be had in this mixture, besides the large stained and blotched sorts, and strains of the leading kinds of commerce, which by careful culture from season to season have been brought to a high degree of perfection. The flowers are of perfect form, enormous size, measuring from two and one-half to four inches in diameter; they will please everyone. In "Greater Cleveland" Mixture we have the cream of varieties, secured regardless of cost from Pansy specialists of our own country and Europe. Oz., \$8.00;  $\frac{1}{8}$  oz., \$1.15.

**Botzum's Giant Pansy Mixture.** A splendid mixture of the finest Giant flowering varieties; embraces the Odier, Cassier and Bugnot strains, the distinct colors of Trimardeau and many other shades and colors that are not found in other mixtures. Per  $\frac{1}{8}$  oz., 75 cts.; oz., \$5.00.

**Very Fine Mixture.** Composed of over 30 separate varieties, remarkably showy and rich in color. Per oz., \$2.00; pkt., 10 cts.

**MIXTURES**

**Giant Trimardeau.** An entirely distinct and beautiful race, with flowers of the richest and most varied shades of color. The plants are of vigorous and compact growth and the flowers are each marked with three large blotches or spots. Per oz., \$3.50.



Petunia, Single, Large Flowered Fringed

### PETUNIA

Well known very ornamental plants producing fragrant and beautiful flowers; they are unsurpassed for massing in beds, and for greenhouse or window culture are valuable. The richness of color, duration of bloom and easy culture will always render them popular. Tender perennials, but will bloom the first season. One and one-half feet high.

**Fringed Ruffled Giants.** Single large flowered fringed. A prize strain of finely fringed flowers measuring over four inches in diameter; remarkable for their brilliancy and variety of color. The seed is saved from finest specimens. Mixed varieties. 1-32d oz., \$2.50.

**Botzum's Special Mixed Dwarfs.** Seed saved from the choicest greenhouse varieties; very large flowers beautifully striped, blotched and spotted. 1 oz., \$2.50.

**Double Large.** Flowering, mixed. 1-64th oz., \$5.00.

**Grandiflora Fimbriata, fl. pl.** Double large flowered fringed. 1,000 seeds, \$1.75; 1-64th oz., \$3.25.

**Hybrida.** Flowers large and in a great variety of colors. Very rich mixture. Per oz., 80 cts.; pkt., 10 cts.

### PHLOX

Among the most esteemed favorites in the list of flowers. Remarkable for the brilliance and abundance of their large terminal flowers, completely hiding the foliage. The blossoms are of many colors, from pure white to deepest purple, eyed and striped. For masses and separate colors and for cutting for bouquets, they are unsurpassed. Hardy annual, one foot high.

**Phlox Drummondii.** Mixed, a great variety of colors. Per oz., \$1.25; pkt., 10 cts.

### LARGE FLOWERING PHLOX

A magnificent class producing flowers nearly twice as large as the ordinary Phlox and of the most brilliant colors imaginable.

**Phlox Drummondii Grandiflora Alba.** Pure white, beautiful. Per oz., \$1.25; pkt., 10 cts.

**Grandiflora "Brilliant."** Brilliant rose with dark red center; very effective. Per oz., \$1.25; pkt., 10 cts.

**Grandiflora Carminea Alba Oculata.** Rich carmine, white eyes. Per oz., \$1.35; pkt., 10 cts.

**Grandiflora Chamois Rose.** Beautiful shade of rose. Per oz., \$1.35; pkt., 10 cts.

**Grandiflora Coccinea.** Deep scarlet, very brilliant. Per oz., \$1.35; pkt., 10 cts.

**Grandiflora Kermesina Splendens.** Vivid crimson; very bright and effective; one of the best for masses. Per oz., \$1.35; pkt., 10 cts.

**Grandiflora, Splendid Mixed.** Richest variety of color. Per oz., \$1.25; pkt., 10 cts.

### PERENNIAL PHLOX

Magnificent hardy flowering plants, growing into strong bushes two to three feet high; bearing immense heads of large waxy flowers. Will flourish in any soil, and require no protection.

**Phlox Ducussata.** Mixed; a great variety of colors. Per oz., \$2.25; pkt., 10 cts.



Phlox Drummondii Grandiflora

**POPPY—Papaver****PINK—See Dianthus**

Old-fashioned flowers, but very popular; there are a few species of great beauty, which are an ornament to any garden.

**Double Carnation Flowered** (*Papaver Somniferum*, fl. pl.). Large globular flowers finely slashed and fringed. Plants from 2 to 2½ feet high. A great variety of colors. Mixed, pkt., 5 cts.; oz., 20 cts.

**Iceland** (*Papaver Nudicaule*). Hardy perennials, but will produce flowers the first season from spring-sown seed. The flowers are white, yellow and orange scarlet; are very useful for cutting and are produced in great profusion, about 12 inches in height. Single finest mixed, pkt., 5 cts.; oz., \$1.50.

**Double Paeony-Flowered** (*Papaver Paeoniflorum*, fl. pl.). A splendid class with large double flowers, greatly resembling Paeonies. Mixed pkt., 5 cts.; oz., 25 cts.

**Oriental**. Enormous deep scarlet flowers, with black blotch on each petal, 3 feet. Pkt., 5 cts.; oz., \$1.25.

**The Shirley** (*Papaver Rhoeas*). A magnificent Poppy with a rich tissue paper like appearance, the colors ranging from purest white to all shades of pink, rose, carmine, and richest crimson, with an entire absence of black. Flowers are single and semi-double. Hardy annual; very rich and effective mixture. Pkt., 5 cts.; oz., 25 cts.

**Poppy, Tulip** (*Papaver Glaucum*). Flowers vivid scarlet with black spot at base of each petal; of tulip shape, the two other petals forming a distinct tulip cup. Plants grow about 1 foot high and produce from 50 to 60 brilliant flowers well above the foliage, resembling scarlet tulip. Hardy annual. Pkt., 5 cts.; oz., 50 cts.

**PORTULACA—Rose Moss**

Brilliant dwarf annuals, blooming profusely from early Summer to Autumn. For low beds and masses of color they are very desirable.

**Finest Single, Mixed.** A large variety, of the most brilliant colors. Pkt., 10 cts.; oz., 75 cts.

**Double Rose-Flowered, Mixed.** The most brilliant shades and choice flowers. Pkt., 10 cts.; oz., \$2.25.



Poppy Shirley

**PYRETHRUM—Golden Feather**

**Roseum** (Persian Insect Powder Plant). Handsome aster-like flowers, with pink rays and deep yellow centers and beautiful fern-like foliage. Per oz., \$1.50; pkt., 25 cts.

**Double**, similar to the above, having large, handsome double flowers. Seed saved from choicest named varieties. ⅛ oz., \$2.00.

### PRIMULA

**Primrose.** *Sinesis Fimbriata.* Single mixed (Chinese Primrose var.) The Chinese Primrose is a beautiful, tender perennial, cultivated for greenhouse and conservatory decorations. Sow seed in shallow pans, with a pane of glass laid over the top to prevent evaporation or the necessity of frequent watering. Six inches. Pkt., 25 cts.;  $\frac{1}{8}$  oz., \$2.00.



**Primula Obconica Grandiflora.** A profuse blooming Primrose, bearing on long stems. It thrives in a cool house, and will grow in favor with those desiring plants that will grow easily. Flowers are pure white, shading occasionally to lilac, and have the true Primrose fragrance.  $\frac{1}{8}$  oz., \$2.50.

### RICINUS—See Castor Oil Plant

### SALVIA—Flowering Sage

A favorite greenhouse and bedding plant, bearing long spikes of flowers in great profusion from July till frost, half-hardy perennials, blooming the first year from seed.

**Salvia Splendens** (Scarlet Sage). Beautiful, bright scarlet,  $\frac{1}{4}$  oz., 60 cts.; oz., \$2.50.

**Salvia "Bonfire"** (Clara Bedman). This is one of the finest Salvias ever introduced. It differs from all others, growing in a compact bush about two feet high by two feet in diameter. Its erect spikes of brilliant, scarlet flowers stand clear above the dark green foliage and completely covers the plant. It attracts immediate attention in the garden, and is one of the most effective and gorgeous plants in cultivation.  $\frac{1}{4}$  oz., 80 cts.; oz., \$2.50.

### SALPIGLOSSIS

Very showy bedding or border plants, with rich colored, erect funnel-shaped flowers. The colors beautifully marbled and penciled, purple, scarlet,

crimson, yellow, buff, blue and almost black. Bloom from August to October. Half-hardy annual; one and one-half to two feet high. **Salpiglossis, Grandiflora.** Large, flowering, finest mixed. Per oz., 80 cts.; pkt., 10 cts.

### SANVITALIA

**Santvitalia Procumbens**, ff. pl. Very pretty dwarf trailing plants, excellent for rock work, borders or edging of beds. It is so completely covered with flowers as to nearly hide the foliage. Double flowers of a brilliant, golden yellow, resembling a miniature zinnia. Hardy annual; six inches high. Per oz., \$1.25 cts.; pkt., 10 cts.

### SCABIOSA—Mourning Bride

Handsome flowers of exceeding sweetness, in hemispherical heads on long stems. Very useful for bouquets, as their long stems work easily, and their striking colors, as well as fragrance, are desirable. Hardy annual, one to two feet high.

**Scabiosa Candidissima**, fl. pl. (Snowball).

Large flowering double, pure white. Very fine. **Large Flowering Double.** Finest mixed. Per oz., 50 cts.; pkt., 10 cts.

### SENSITIVE PLANT—*Mimosa Pudica*

A very curious plant, with elegant foliage and globular heads of pink flowers; well known for the extreme irritability of its leaves and foot stalks which close and droop at the slightest touch, or in cloudy, damp weather, and during the night. Tender annual; one and one-half feet high.

**Sensitive Plant.** Per oz., 50 cts.; pkt., 10 cts.

### STOCK



#### Stock, Large Flowering Ten Weeks

The stock is one of the most popular plants either for bedding or for pot culture. It has for many years been a general favorite, but in late years the Germans have grown them in such perfection that they are considered almost indispensable where a fine display is wanted. A large proportion of the double flowers are produced from seed. Hardy annual; one foot high. **Giant Perfection.** Large flowering, perpetual. Dwarf mixed. Oz., \$2.25; pkt., 10 cts.

**Large Flowering Dwarf, Ten Weeks.** Large, double flowers. Dwarf. Mixed. Oz., \$2.25; pkt., 10 cts.

**STOCK—Continued**

**Special Ten Weeks' Stocks, Mixed;** a very rich mixture. Per oz., \$1.50; pkt., 10 cts.  
**Botzum's Special Ten Weeks' Stock Seed,** saved from special selected pot-grown plants.  
**Beauty of Nice, Mixed;** per oz., \$2.25; pkt., 10 cts.

**SUNFLOWER—*Helianthus***

Adapted by its stately growth for a back-ground to a lawn or screen to hide unsightly places. It is also raised as an absorbent of miasma in damp or ill-drained situations, thus preventing fevers. The flowers are really quite attractive. Hardy annual; five feet high.



Sunflower Double

**Dwarf Double.** (*Helianthus Nanus*, fl. pl.) Golden yellow, two and one-half to three feet high; true. Per oz., 35 cts.; pkt., 5 cts.  
**Sunflower, Double.** (*Helianthus Californicus*, fl. pl.) Large, double orange. Per oz., 20 cts.; pkt., 5 cts.  
**Large Russian.** A very tall growing single variety, often 15 to 20 feet high; the stalks are sometimes used for fuel. Per oz., 5 cts.

**SWEET WILLIAM**  
*Dianthus Barbatus*

Sweet William

A bed of the finer varieties sports into an endless variety of colors, and presents a beautiful sight. For display in the garden, the Sweet Wil-

liam is unsurpassed. The seed can be planted very early in the spring in open ground and will blossom the following autumn; or it can be sown in August and it will make fine blooming plants for spring. The plants will bloom several years, but young plants will bloom better, and seed should be sown every year. Hardy perennial; one and a half feet high.

**Sweet William, Double.** (*Dianthus Barbatus*, fl. pl.) Fine mixed. Per oz., \$1.25; pkt., 10 cts.  
**Sweet William, Single.** Mixed. Per oz., 40 cts.; pkt., 5 cts.

**SWEET SULTAN—*Centaurea*****TROPAEOLUM MINOR**

See Dwarf Nasturtium

**TROPAEOLUM—*See Lobbianum* and Majus. See Tall Nasturtium****THUNBERGIA**

**Thunbergia Alata.** Beautiful rapid growing annual climbers, splendid for trailing over trellises, fences, etc.; very pretty flowers in buff, orange, white etc.; mixed colors. Per oz., \$1.25; pkt. 10 cts.

**VERBENA**

No plant is more generally cultivated, or more eagerly sought after than the Verbena, and no plant excels it for masses in beds on the lawn. In the varieties may be found every color except yellow. They flower perfectly well from seed sown in the spring. If sown in open ground in May they will bloom in August, but if started in the house, in pots in winter, they will be in bloom sooner. Half-hardy perennial trailer; one foot high.



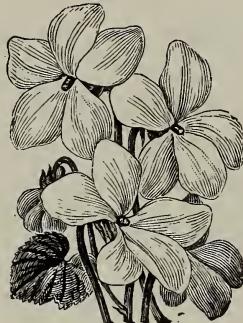
Verbena

**Verbena Hybrida Mammoth.** Has flowers nearly twice as large as the ordinary sorts, of very brilliant colors and large, distinct eyes. The plants are vigorous and very free flowering. Per oz., \$1.25; pkt., 10 cts.

**Hybrida, Fine Mixed.** Seed saved from a beautiful collection. Per oz., 75 cts.; pkt., 5 cts.

**VIOLET—Viola**

The Violet should not be wanting in any garden, on account of its fragrance and early appearance. A single flower will perfume a whole room. Succeeds best in a shady, sheltered place, and can be easily increased by dividing the roots. Double violets do not seed Hardy perennials; six inches high. The seed germinates very slowly.



Violet

**Violet, Single, Sweet-Scented.** (*Viola Odorata Semperflorens.*) Flowers blue. Per oz., \$2.00; pkt., 25 cts.

**VINCA**

Ornamental, free-blooming plants; flowering from seed the first season if sown early and continuing until frost. Glossy, green leaves and handsome flowers. May be potted and kept in bloom through the winter. One and one-half to two feet high.

**Vinca, Rosea.** Rose, with crimson eye. Oz., \$1.00.

**Vinca, Rosea Alba.** White, with rose center. Oz., \$1.00.

**Vinca, Alba Pura.** Pure white. Oz., \$1.00.

**Vinca, Fine Mixed.** Oz., \$1.00.

**WALLFLOWER—Cheiranthus Cheiri**

The large, massive spikes of the Wall Flower are very conspicuous in beds and borders, and are very useful in making bouquets.



Wall Flower, German Double

They are deliciously fragrant and combine many shades and colors. Tender perennial; one and one-half feet high.

**Wall Flower, Fine German Double.** Mixed. Oz., \$3.50; pkt., 10 cts.

**Wall Flower, Single.** Per oz., 35 cts.; pkt., 5 cts.

**WILD CUCUMBER VINE  
See Echynocystis****ZINNIA**

No flowers are more easily grown from seed in the open ground, and few bloom so continuously through the summer and autumn as the Zinnia. They grow two feet high and bear flowers of immense size, perfectly double, and as perfect in form as Dahlias. Hardy annual.

**Zinnia, Elegans, fl. pl.** Tall double, mixed. Perfectly double flowers of grand form, large size and brilliant colors. Per oz., 40 cts.; pkt., 5 cts.

**Mixed Flower Seed.** Annuals, for open ground sowing. Makes a grand display. Per oz., 10 cts.

## INOCULATE SWEET PEAS

Sweet Peas are a legume just as Soy Beans, Alfalfa, and Field or Garden Peas are legumes. All legumes should be inoculated. Customers who inoculated sweet peas last year are enthusiastic over results. Many who had for years been trying to grow sweet peas, with but indifferent success, succeeded wonderfully well by inoculating.

Inoculation increases the growth, producing large luxuriant vines, and increases the number of blossoms. The blossoms also will be larger, much larger. All this is due to the increased amount of nitrogen supplied the plant.

But—and this is what our customers speak of most generally, what they grow more enthusiastic over—its flower is more perfect, with thicker petals, the colors are more brilliant, the tints are deeper; shades of color dull and faint before come out distinct and clear and the tints fairly scintilate and glimmer as they merge from white to pinks and blues and carmines and purples.

Inoculation assures success with sweet peas. State that it is to be used for sweet peas.

Inoculate with Botzum Brothers' Standard Inoculating Bacteria.

### PRICES

Small Size-----	50 cents
Large Size-----	75 cents
Special Size .....	25 cents

Inoculated Sweet Peas

**General Culture.** Sweet Peas delight in a soil inclined to be clayey and, as the little beauty is a gross feeder, a good supply of well-rotted manure should be mixed with the ground. Fall is the best season to prepare the soil. A good many failures have been made by manuring in the spring, for the reason that all pea vines like a moist ground, and the heat originated by the manure combined with the heat from the sun, is too much for the young vines, which turn yellow and die. The best season to sow the seed is as soon in the spring as the ground can be worked. Late sowing produces rank growth, but few flowers. Dig a trench one foot deep by sixteen or eighteen inches wide and mix in it six inches of top soil, with old manure. In this plant your seeds in two rows and drop one pea every inch or two; then cover with two inches of soil, gradually filling the trench as they grow. One side has to be a little lower to allow surplus water to drain off. Flowers must be picked off every day if you want them to bloom all through the summer. Bone dust and nitrate of soda will hasten the time of flowering.

### SPENCER VARIETIES

**America.** White ground, heavily striped and flaked with bright crimson scarlet. A large bold flower of splendid form. Oz., 35 cts.

**Apple Blossom.** Standard very bright rose wings primrose with a flush of rose tint. Oz., 25 cts.

**Asta Ohn.** A soft pinkish lavender self. Flowers very large and beautifully waved. A very charming variety. Oz., 25 cts.

**Blanche Ferry.** A giant type of Spencer form, with rose standard, and wings white suffused and tinted with light pink. Oz., 25 cts.

**Countess Spencer.** The original giant flowered Spencer, with finest waved standard and wings clear pink, deepening somewhat towards the edge, but almost self colored. Oz., 30 cts.

**Dainty.** White ground, with beautiful picotee edge of rose pink. Splendid form. Oz., 25 cts.

**Flora Norton.** Light blue. Oz., 25 cts.

**King Edward VII.** The best pure red Spencer, very large, with especially immense wings. Oz., 35 cts.

**Mrs. Routzahn.** Buff or apricot ground flushed and suffused with delicate pink. Oz., 25 cts.

**Mrs. Townsend.** White suffused and edged with blue. Oz., 30 cts.

**Nubian.** Fine chocolate color. Oz., 30 cts.

**Othello.** Of immense size, with large drooping wings, rich maroon. One of the best dark sweet peas. Oz., 35 cts.

### UNWIN AND GRANDIFLORA TYPES

**Black Knight.** Dark maroon. Oz., 20 cts.

**Blanche Ferry.** Pink and white. Oz., 20 cts.

**Dainty.** White, with pink edge, unique. Oz., 20 cts.

**Dorothy Eckford.** One of the best white. Oz., 20 cts.

**Emily Henderson.** White, early and free. Oz., 20 cts.

**Flora Norton.** A very bright blue. Oz., 20 cts.

**Gladys Unwin.** Pale rosy pink. Oz., 20 cts.

**King Edward VII.** Special selection, especially fine. Oz., 20 cts.

**Lady Grisel Hamilton.** Best of all lavender sorts. Oz., 20 cts.

**Lord Nelson.** Deeper and richer than Navy Blue, same as Brilliant Blue. Oz., 20 cts.

**Mrs. Walter Wright.** Beautiful mauve color. Oz., 20 cts.

**Navy Blue.** Deep violet. Oz., 20 cts.

**Nora Unwin.** Giant white. Oz., 20 cts.

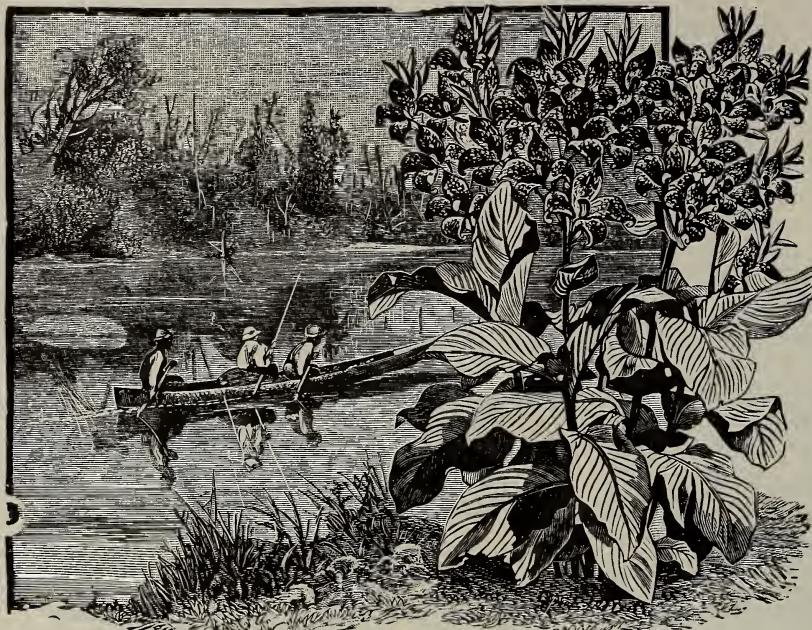
**Salopian.** One of the best of the dark bright reds. Oz., 30 cts.

**White Wonder.** The many-flowered white. Oz., 25 cts.

### SWEET PEAS IN MIXTURE

**Eckford's New Mixed.** A mixture of Eckford's choicest varieties. Will astonish and delight everyone. Oz., 10 cts.;  $\frac{1}{4}$  lb., 30 cts.; 1 lb., \$1.00.

# BULBS FOR SUMMER AND AUTUMN BLOOMING



Orchid Flowered Canna

## Number of Plants for Circular Beds

3 ft. diameter, 6 inches apart.....	28 plants
5 ft. diameter, 6 inches apart.....	80 plants
6 ft. diameter, 6 inches apart.....	112 plants
8 ft. diameter, 6 inches apart.....	200 plants
3 ft. diameter, 12 inches apart.....	7 plants
5 ft. diameter, 12 inches apart.....	20 plants
6 ft. diameter, 12 inches apart.....	28 plants
8 ft. diameter, 12 inches apart.....	50 plants

## CANNAS

Nothing is more effective for grouping on lawns or for large beds in parks than these ever-blooming Cannas. They commence flowering very soon after being planted out in the ground and continue until stopped by frost in the fall. Grown as pot plants they make beautiful, showy specimens for the porch during summer, and if taken into the conservatory or window garden before frost, will continue to bloom all winter.

**Our List of Cannas** has this season been carefully revised; all inferior varieties have been discarded; the list of varieties offered below is a selection of sorts that have been thoroughly tested, and whether used singly or for massing are certain to give the greatest satisfaction.

**Dormant roots** can be supplied until May 1st. After which started plants of the standard varieties can be obtained.

**Strong Dormant Roots, with 2 to 3 Eyes.**  
All varieties except King Humbert, 10 cts. each; \$1.00 doz.; \$8.00 per 100.

**King Humbert.** 15 cts. each; \$1.50 doz.; \$10.00 per 100.

## DARK FOLIAGE

**King Humbert.** Four feet. Bright orange-scarlet flowers streaked with crimson. Bronze foliage with brownish green stripes.

**Duke of Marlboro.** Four feet. Dark, rich, vel-

In planting beds always begin by outside row and leave a space between plants and edge of bed of half the distance plants are to be set apart in the bed. If plants are to be set 6 inches apart leave a space 3 inches wide. Square beds will require same number of bulbs or plants as circular beds if its diameter is same length as one side of the square. To find out number of plants needed for an oval bed measure the length and breadth; divide the total by 2, and this will give you the diameter of a circular bed. ( $6+10=16$ ;  $16\div 2=8$  ft.) Find out in the following table the number of plants required for your oval bed 6 by 10 ft.

10 ft. diameter, 6 inches apart.....	320 plants
10 ft. diameter, 18 inches apart.....	36 plants
14 ft. diameter, 6 inches apart.....	612 plants
10 ft. diameter, 12 inches apart.....	80 plants
10 ft. diameter, 24 inches apart.....	20 plants
14 ft. diameter, 12 inches apart.....	153 plants
14 ft. diameter, 18 inches apart.....	68 plants
14 ft. diameter, 24 inches apart.....	39 plants

very crimson; fine shapely flower, in large, well-filled tissues.

**Florence Vaughan.** Three and one-half feet. Rich golden, almost covered with bright red spots.

**Louisiana.** Orchid flowered, velvety scarlet. Flowers very large, sometimes 6 inches across. Foliage bright green edged with narrow purple band. Height 6 feet.

**Chas. Henderson.** Crimson scarlet with yellow throat. Enormous trusses. Foliage green. Height 3½ feet.

**Alphonse Bouvier.** Very large clear crimson. Height 4½ feet.

**Wyoming.** Immense umbels of massive orange flowers; bronze-purple foliage. A splendid border; 7 feet.

**Souvenir Antoine Crozy.** The finest of the gilt edged type. Plant grows 2½ to 3 feet high. Flowers intense scarlet, bordered with a broad band of gold. Does not fade with heat, and makes a striking appearance.

**Madam Berat.** Very fine dwarf, red, green leaf.

## AMARYLLIS

If to be sent by mail, add 3 cts. each extra. Large bulbs producing brilliant colored, lily-like flowers. Has long, slender, succulent leaves; usually grown in pots; height about 15 inches.

**Belladonna Major.** White turning to rose as the flower ages. Each 20 cts.; dozen, \$2.00.

## BULBS—Continued

**CALADIUM ESCULENTUM**  
Elephant Ears

Caladium Esculentum

A very effective plant and suitable for either a single plant on the lawn, masses in beds, or for margins of water; its very distinct apron-like leaves often attain the length of three feet by twenty inches wide. Bulbs can be stored in dry sand in winter and kept from year to year.

**Second Size Bulbs,** 7 to 9 inches. Market Price.

**First Size Bulbs,** 9 to 11 inches. Market Price.

**TRITOMA**

This is commonly called Red Hot Poker, a name which admirably describes the flower. The leaves are narrow and the stalk grows from the root to a height of two and a half feet. While not particularly graceful the flower is very conspicuous on account of its brilliant color and it looks well among other shrubs or in a large bed by itself. The roots are not quite hardy and should have a fair covering of litter or straw, to survive. We get the Pfizerii, which is the largest and freest bloomer.

Price, 25 cts. each; \$2.50 per dozen.

**GLADIOLUS**

The gladiolus is the most beautiful of the summer bulbs, with tall spikes of flowers two feet or more in height, often several from the same bulb. The flowers are of almost every desirable color.

The culture is very simple; they thrive in almost any good soil, except a stiff clay, require full sunlight, and are only liable to injury from rank manure. Plant the bulbs six to nine inches apart; the large ones four inches and the small ones two inches deep. Make an early planting of the smallest bulbs first, as soon as the ground is sufficiently dry and warm, and continue to plant at intervals of two weeks during the spring and early summer. In this way a succession of

bloom may be had from mid-summer until frost. In autumn, before freezing, they should be dug and dried, the earthy and old roots removed



Gladioli

and then stored in a cool, dry place, secure from frost until spring.

Ask for prices on fancy named and mixed varieties.



Lillium Speciosum

**DAHLIAS**

The Dahlia has always been a favorite for autumn flowering. The flowers are so symmetrical and perfect, and the range of brilliant

**BULBS—Continued**

colors so beautiful and varied, that they will always be popular where display is wanted. The roots are tender and easily injured by frost. They should be set three feet apart, after all danger of frost is over, and during winter placed in a cool cellar and not allowed to freeze. The plants should be supported by tying to stakes. Very choice collection of the finest field-grown roots of Cactus, Decorative, Large Flowering or Show types. Each root tagged with name and color. 15 cts. each; \$1.50 doz.

If wanted by mail add 25 cts. per dozen for postage.



Dahlias

**JAPANESE LILIES**

The Lily has been, with eminent propriety, styled the "Queen of Flowers," and truly no flower conveys so adequate an idea of queenly beauty, majestic grandeur and faultless purity as the Lily. Their culture is simple, and with a little care failure is impossible. The bulbs should be planted in spring, as soon as frost is out of the ground, until the first of May; the earlier the better. Select a well-drained spot, dig the soil deep and make it fine, enriching it abundantly with very rotten cow manure and adding a liberal mixture of sand. Set the bulbs from three to five inches deep, according to size. During the winter it is advisable to cover the surface of the bed with a thin layer of manure, which will not only afford slight protection to the bulbs, but will materially enrich the soil. In spring the manure may be removed or dug in between the rows. Care should be taken that they have proper drainage, no water being allowed to stand around the roots. Once firmly established, they should not be disturbed oftener than once in five years.

**Speciosum Album.** Large white flowers of great substance, with a greenish band running through the center of each petal; very fragrant. Extra large bulbs, 11-13 in. cir., each 45 cts.

**Auratum.** (Golden Banded Lily of Japan.) This magnificent Lily succeeds well everywhere. It is justly entitled to the name often given it, "The Queen of Lilies," as it is decidedly the most beautiful of all lilies. The immense flowers are produced in the greatest profusion, and are deliciously fragrant. In beauty of color and markings it surpasses all others. The large white petals are thickly spotted with rich chocolate crimson, and have a bright golden yellow band through the center of each.

**Speciosum Rubrum.** One of the best lilies. White, with band and spots of rose or crimson on each petal. The petals are beautifully recurved as shown in cut. Extra large bulbs, 11-13 in. cir., each 45 cts.

**Speciosum Melpomene.** Very large flowers; rich blood-crimson, heavily spotted, 11 to 13 in. Each 45 cts.

**Lilian Gigantum.** 10 to 12 in. The pure white Lily. Each 50 cts.

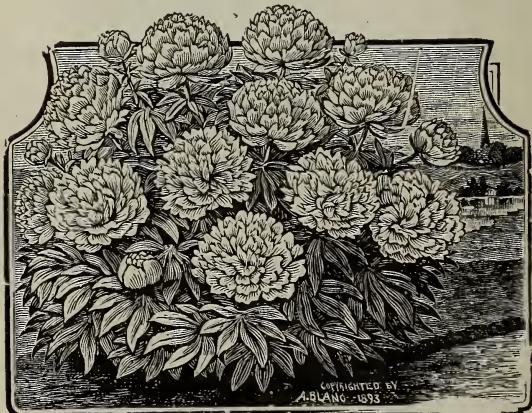
**TUBEROSE**

One of the most fragrant and beautiful of the summer flowering bulbs. By skillful management a succession of flowers may be obtained all the year round. For early flowers, they can be started in February or March in the greenhouse or hot bed; and for a succession they may be planted at intervals as late as August. For flowering in the open border, plant about the first of May. Each bulb flowers but once, but the smaller bulbs can be set out for future flowering when their growth is complete.

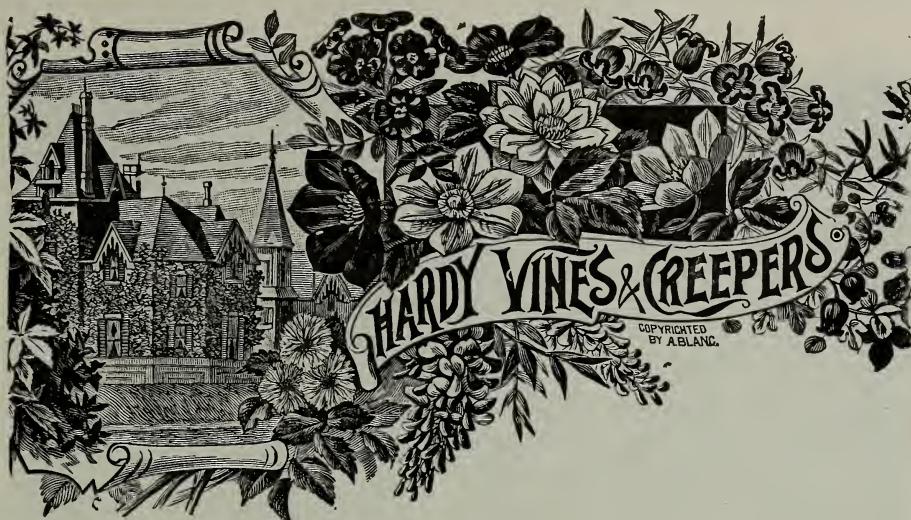
**Dwarf Double Pearl.** This variety is characterized by its short, robust stem and long spikes of large flowers in great profusion, perfectly double and twice the size of the common tuberose, while of equally delicious fragrance. Market Price.

**HESBACEOUS PEAONIES—Hardy**

Magnificent hardy plants, almost rivaling the rose in brilliancy of color and perfection of bloom. Some of the varieties are very fragrant. They require little or no care and produce larger and finer blooms when well established. We have a choice assortment of these beautiful plants in shades of red, pink and white. Market Price.



Paeonies



### CINNAMON VINE

A beautiful rapid climber with very large heart-shaped leaves. Perfectly hardy, the stem dying down every autumn, but growing in spring so rapidly as to cover any trellis or arbor very early in the season.

Large roots, 15 cts. each.

### CLEMATIS Large Flowered Variety

The Clematis is entirely hardy, and for covering large spaces quickly is unrivaled. Blooms during the entire season and embraces a great variety of color. Our list, while not extensive, includes the best varieties, such as we know to succeed best in our climate. The plants we offer are Holland grown, three and four years old; they are exceptionally strong and will bloom with full vigor the first season. Plant any time from April to June. The plants must have a sunny location and good culture, and should be pruned early in the spring. Many failures in the growing of Clematis are the result of too shallow planting; the crown of the roots should be set at least three inches below the surface of the soil.

**Jackmanii.** A strong, healthy grower and blooms with astonishing profusion from July to November, on shoots of present season. Flowers are of a deep velvety purple and very large. 75 cts. each.

**Jackmanii Alba.** Pure white. 75 cts. each.

**Henryi.** Creamy white, large and handsome. 75 cts. each.

**Clematis Intergulifolia Durandi.** The most valuable of the blue flowering varieties, a vigorous and healthy grower not subject to disease. 75 cts. each.

**Villa de Lyon.** Deep crimson; very fine. 75 cts. each.

### CLEMATIS PANICULATA

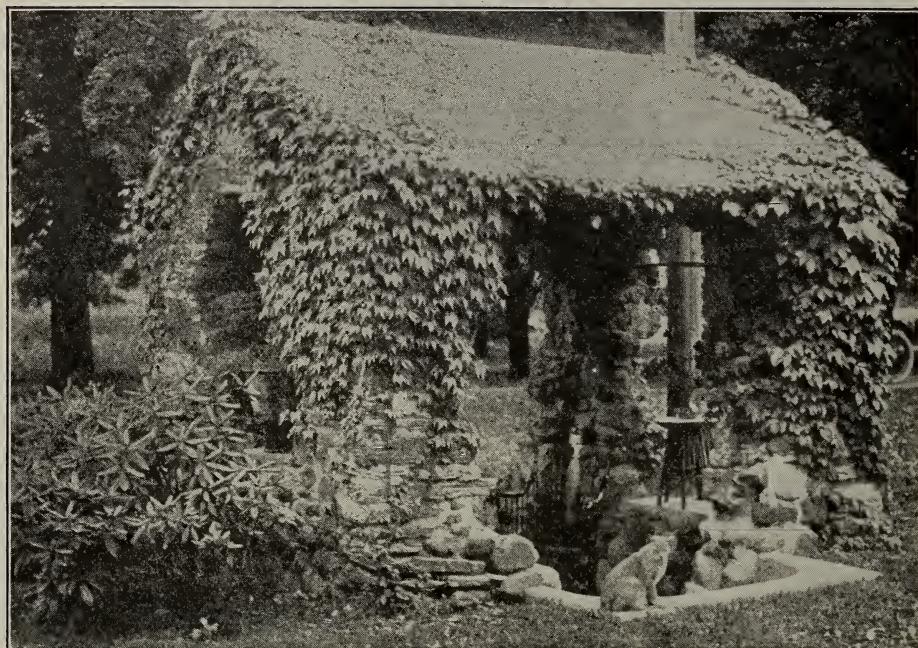
A remarkably beautiful hardy climber. Flowers pure white, star-shaped, about one inch in diameter, borne in large clusters. Plant is a strong vigorous grower, the flowers are very fragrant and appear in the greatest profusion during August, and continue until late in the fall. Succeeds well in almost any position. Strong field-grown plants. Each 50 cts.

### CHINESE MATRIMONY VINE

It is a hardy everywhere. As a vine for permanent effect, or for shading a sunny window, covering an arbor or veranda, and for perfect hardiness it cannot be excelled. Pale purple flowers and scarlet berries are constantly appearing from early in the spring till late in the fall. Do not confound this with the old sort. 75 cts. per dozen.

### WISTARIA

**A Popular Hardy Vine.** Bearing long, racemes of flowers. Two colors, lavender-blue and pure white. 75 cts. each.



*Ampelopsis Veitchii*—Boston Ivy

### AMPELOPSIS VEITCHII

#### Boston Ivy or Japan Ivy

No picture can portray the beauty of this great climbing plant. It is adapted to all situations, and transforms the humblest cottage. It is entirely hardy in the most exposed places, attaining a height of 20 to 30 feet in two or three years, clinging to stones, brick or woodwork with the tenacity of ivy. The leaves, overlapping each other, form a dense sheet of green. For covering dead trees, rocks, walls, etc., it has no equal. In the summer the foliage is a rich shade of green, but in the fall it assumes the most gorgeous tints of scarlet, crimson and orange, so dazzling as to be seen at a great distance.

Splendid field grown plants, very large, three years old, 20 cts. each; \$2.00 per doz.

**Aristolochia Sipho.** (Dutchman's Pipe.) Brownish flowers, resembling a miniature pipe; splendid for archways or verandas. 50 cts. each.

### MADERIA VINE

Tuberous rooted climber, with glossy, green leaves and delightfully fragrant white blossoms. Sometimes called "Mignonette Vine." It is of rapid growth, and from a few tubers vines will be produced sufficient to cover one side of a cottage in a single season. The tubers are tender and must be protected from frost during winter. 10 cts. each.

### HONEYSUCKLE

**Lonicera Japonica** (Chinese Evergreen Honeysuckle.) Very fragrant, yellow and cream-colored flowers; dark green foliage. Each 75c.

**Lonicera Brachypoda, var. Halleana** (Hall's Evergreen Honeysuckle.) Vigorous grower, fragrant yellow and white flowers from mid-summer until frost. Each 75 cts.

## SPECIAL NOTICE TO CUSTOMERS

Owing to the increased cost of labor, scarcity of seedling stock, and other abnormal conditions, we have been compelled to advance our prices on Nursery Stock, consistent with our increased expense.

We advise our friends and customers, who contemplate purchasing Trees, Shrubs, Evergreens, etc., to do so now, as the future seems to give no promise of relief, in the way of lower prices.

Assuring all, of our very best intentions to furnish the very best stock of its kind, and to see that everything is packed and shipped in good order, we solicit your planting orders.

We have secured the services of one of Cleveland's best Landscape Engineers, who will cheerfully give estimates and advise at all times.

**THE BOTZUM BROS. CO.**

## Planting Chart For Shrubs

### FLOWERING SHRUBS

#### With variegated or colored foliage

Althea, Variegated.  
Barberry, Purple-leaved.  
Cornus, Elegantissima.  
Cornus, Spathei Aurea.

Elder, Golden-leaved.  
Euonymus, Radicans Variegated.  
Filbert, Purple-leaved.  
Kerria, Japonica Variegated.  
Philadelphus Aureas.

Prunus Pissardi,  
Purple-leaved Plum.  
Spirea, Opulifolia Aurea.  
Weigelia, Variegated.

### FLOWERING SHRUBS

#### Producing ornamental fruit succeeding the flowers

Barberry, Scarlet fruit. September to January.  
Celastrus Scandens, Bittersweet. Yellow fruit  
in fall and winter.  
Cornus Alba. White berries in September.  
Currant, Flowering. Large yellow and black fruit  
in July.  
Elder, Golden. Purple fruit in August.  
Elder, Racemosus. Scarlet fruit in August.  
Eleagnus Longipes. Red fruit in July.  
Euonymus. Red and white fruit in fall and winter.

Lonicera in variety. Upright Honeysuckle. Red  
and yellow fruit in August.  
Mahonia. Blue berries in July.  
Symphoricarpu. Snowberry. White berries in  
early winter.  
Symphoricarpu Vulgaris. Red fruit in fall and  
winter.  
Viburnum Lantana. Black fruit in September.  
Viburnum Opulis. Red fruit in August and Sep-  
tember.

### FLOWERING SHRUBS

#### Named in the order in which they flower

**MAY**  
Forsythia in variety.  
Japan Quince.  
Almonds, Flowering.  
Spirea, Prunifolia.  
Spirea, Arguta.  
Spirea, Thunbergii.  
Spirea, Van Houttei.  
Viburnum Lantana.  
Mahonia.  
Honeysuckles, Tartarian.  
Wistaria.

**JUNE**  
Lilacs, in variety.  
Deutzia, Gracilis.  
Deutzia, Lemoinei.  
Viburnum Sterilis, Common Snowball.  
Viburnum Plicatum, Japan Snowball.  
Weigelia in variety.  
Syringia in variety.  
Rhododendrons in variety.  
Paeonias.  
Clematis, large flowering.  
Deutzia, Pride of Rochester.  
Spirea, Billardi.  
Spirea, Anthony Waterer.  
Spirea, Callosa Alba.

**JULY**  
Hydrangea, Arborescens  
Grandiflora.

**AUGUST  
AND SEPTEMBER**  
Hydrangea, Paniculata  
Grandiflora.  
Altheas in variety.  
Clematis, Paniculata.

### HARDY ORNAMENTAL SHRUBS

The annual seed-plantings in their bloom, and the bright colors of the hardy perennial flowers, hold an undisputed and important place in the beautifying of the home grounds; but with all their beauty and utility, there is still something lacking to make a complete whole, unless there is a harmonious complement of the hardy flowering shrubs. The man with extensive grounds can plant in masses and create magnificent effects on a grand scale; but the average owner of a small home, with its limited grounds, must meet the need with discrimination. The list of flowering shrubs is rich in variety, and yield their treasures to every requirement. Just a few chosen sorts will yield, not only a summer display of charming flowers and a fall succession of ornamental berries; but the yellow, white, gray, purple and greens of bark and foliage brighten the entire season. Home-makers should bear in mind that shrub-planting builds for posterity as well as for the present.

**Althea** (Rose of Sharon). Bloom late in August and September, with a profusion of large and brightly colored flowers much like the tender Hibiscus in form. Grown in standard form, they attain 10 to 12 feet in height and make attractive specimens. Planted more compactly and occasionally pruned, they are both serviceable and showy as hedges.

**Double Rose, Double White, Double Purple.** Two to three feet. Each 50 cts.

**Double Red and Double Striped.** Two to three feet. Each, 60 cts.

**Forsythia Intermedia.** An erect growing shrub with arching branches; bright yellow flowers which appear in May.

	Each	Per 10
2 to 3 feet .....	\$0.60	\$5.00
3 to 4 feet .....	.75	7.00

**Forsythia Suspensa** (Drooping Golden Bell). A graceful shrub with long and slender drooping branches. The leaves, which stay on the plant until frost, are dark green. Flowers golden yellow. Grows to 8 feet. Very showy.

	Each	Per 10
2 to 3 feet .....	\$0.60	\$5.00
3 to 4 feet .....	.75	7.00

**Deutzia Gracilis** (Slender Deutzia). Small usually about 2 feet high. Leaves bright green; white flowers in graceful nodding racemes appear in June.

	Each	Per 10
15 to 18 inches .....	\$0.60	\$5.00

**Deutzia Lemoinei.** Similar to Deutzia gracilis, but more vigorous and showier flowers. Grows to a height of about three feet.

	Each	Per 10
2 to 3 feet .....	\$0.60	\$5.00

**Deutzia, Pride of Rochester.** A vigorous grower with very large, double white flowers. A very valuable variety.

	Each	Per 10
2 to 3 feet .....	\$0.75	\$7.00

**Hydrangea Paniculata Grandiflora.** The most popular Hydrangea and one of the showiest shrubs in cultivation. Too well known to require further description.

	Each	Per 10
2 to 3 feet .....	\$0.60	\$5.00
Tree-form, 3 to 4 feet .....	1.50	14.00

**Lilacs.** We can supply these beautiful shrubs in both bush and tree form. We have single and double white, single and double purple, blue and violet purple. In ordering, please state color desired.

	Each	Per 10
Bush Lilacs, 2 to 3 feet.....	\$0.75	\$7.00
Tree Lilacs, 3 to 4 feet.....	1.00	9.00

**Lonicera** (Bush Honeysuckle). Pretty soft-

leaved shrubs with delicate fragrant flowers followed in the fall by colored berries. The flowers are of characteristic Honeysuckle odor and one flower is often sufficient to scent a whole room. There are many varieties of this valuable shrub. Below we are naming only the best.

**Lonicera Tartarica Alba** (Tartarian Honeysuckle). Tall growing shrubs attaining a height of 8 to 10 feet. Bears great quantities of white flowers followed by red and orange berries. Very ornamental.

	Each	Per 10
2 to 3 feet .....	\$0.60	\$5.00
3 to 4 feet .....	.75	7.00

**Mahonia Aquifolia** (Holly-leaved Mahonia). Medium-sized shrub; handsome, glossy green foliage which is evergreen. Bright, yellow flowers are borne in May, followed by bluish berries; very ornamental.

	Each	Per 10
½ to 2 feet.....	\$1.50	\$9.00

**Philadelphus Aureus** (Golden Syringa). Dwarf, compact growing shrub; valuable for contrasting in groups. Probably the best golden-leaved shrub in cultivation.

	Each	Per 10
15 to 18 inches .....	\$0.75	-----

**Philadelphus Coronarius** (Garland Syringa). Upright growth, arching branches, attaining a height of 8 to 10 feet. Flowers creamy white, very fragrant, borne in great profusion. Very desirable for background or screen.

	Each	Per 10
2 to 3 feet .....	\$0.50	\$4.50
3 to 4 feet .....	.60	5.00

**Rhododendrons.** Through its blooming season no shrub is more handsome than this. Like Azaleas, they thrive best where planted in beds in a sheltered and somewhat shaded situation. During their blooming season, the plants appear as solid masses of bloom. They should be protected with leaves or straw during the winter.

**Rhus Cotinus** (Purple Fringe or Smoke Bush). In June this shrub bears large masses of purplish flowers giving the appearance of smoke, hence its name. In Fall the leaves change to varying shades. Very unique.

	Each	Per 10
2 to 3 feet.....	\$0.75	\$7.00

**Sambucus Aurea** (Golden Elder). Thrifty shrubs that will do well in any locality when planted where it can receive sunlight. The foliage is beautiful bright golden-yellow and very striking when planted in masses. Naturally grows tall, but can be pinched back to a compact little bush.

	Each	Per 10
2 to 3 feet .....	\$0.60	\$5.00

**HARDY ORNAMENTAL SHRUBS—Continued**

**Spirea Anthony Waterer.** Similar to the above with bright rosy crimson flowers. Blooms until fall and is one of the best dwarf growing shrubs. A very desirable flowering hedge plant.

	Each	Per 10
18 to 24 inches .....	\$0.75	\$7.00

**Spirea Van Houttei (Bridal Wreath).** A grand and graceful shrub with numerous arching branches. Leaves small, dark green; flowers white, borne in clusters, completely covering the shrubs in early summer. One of the most beautiful and popular shrubs in cultivation. Recommended for specimens for the lawn or for flowering hedges. As this shrub is generally in bloom on Decoration Day, it is the handsomest shrub for cemetery planting and especially recommended for this purpose.

	Each	Per 10
2 to 3 feet .....	\$0.50	\$4.50
3 to 4 feet .....	.60	5.00
4 to 5 feet .....	.75	7.00

**Spirea Billardii.** Hardy, upright shrub, 4 to 5 feet high. Flowers bright pink, produced in long panicles in June. Very showy and attractive.

	Each	Per 10
2 to 3 feet .....	\$0.25	\$2.00

**Spirea Prunifolia fl. pl.** The original Bridal Wreath. Small, round, shiny leaves that take on beautiful colors in Autumn, small white flowers cover the shrub in May.

	Each	Per 10
2 to 3 feet .....	\$0.50	\$4.50

**Spirea Thunbergi.** Low, bushy shrub with delicate green, feathery foliage which takes and retains lovely tints in Autumn. Small white

flowers appear in abundance in May. Hardy everywhere.

	Each	Per 10
18 to 24 inches .....	\$0.60	\$5.00

**Viburnum Opulus Sterilis (Snowball).** A grand old-time shrub with handsome, white flowers in large globular clusters appearing in May.

	Each	Per 10
2 to 3 feet .....	\$0.60	\$5.50
3 to 4 feet .....	.75	7.00

**Viburnum Plicatum (Japanese Snowball).** A handsome shrub with showy white flowers borne in globular clusters and exceedingly beautiful foliage.

	Each	Per 10
2 to 3 feet .....	\$0.75	\$7.00

**Weigelia Candida.** A hardy, free flowering shrub of spreading habit growing to 5 feet high. Very large, pure white flowers, borne in profusion in June. Best white Weigelia.

	Each	Per 10
2 to 3 feet .....	\$0.60	\$5.50
3 to 4 feet .....	.70	6.50

**Weigelia Eva Rathke.** Growth similar to the above. Flowers deep carmine-red. Best red Weigelia.

	Each	Per 10
2 to 3 feet .....	\$0.75	\$7.00

**Weigelia Rosea.** Very hardy, compact growing sort. Rose colored flowers in great profusion.

	Each	Per 10
2 to 3 feet .....	\$0.50	\$4.50
3 to 4 feet .....	.60	5.50

**Weigelia Rosea Variegata.** One of the very best variegated leaved shrubs. Leaves bordered creamy white; flowers light pink; shrub dense and compact.

	Each	Per 10
1½ to 2 feet .....	\$0.35	\$3.00

**ROSES**

Roses should be planted where they will receive sunlight for at least half the day. In planting, avoid trees and the shady side of buildings. Well-rotted stable manure or bone meal should be spaded into the soil on which they are to be planted. Our Roses should be pruned back to six inches as soon as they are planted.

We grow only the hardy varieties as we have found that they are the most satisfactory for the North Central States. Please do not compare our strong, field-grown plants with the small inferior cutting plants generally sent out by mail order houses. Our Roses with the exception of one or two varieties of Climbers are all budded on hardy root stalks imported from France. The roots all have grown in our nursery rows for two years and the tops for one year. No thriftier or harder Roses can be grown.

**PRICES ON ROSES**

	Each	Per 10
Bush Roses .....	\$1.00	\$9.00
Ramblers and Climbers .....	.80	7.50

**BUSH ROSES**

**Anna de Diesbach.** Brilliant crimson; large finely formed flowers.

**Baby Rambler.** Shapely, compact, bushy plant about 18 inches high, producing very double crimson flowers in great profusion from Spring until frost. Desirable for bedding or hedge.

**Baron de Bonstetten.** Beautiful dark red,

changing to velvety-maroon. One of the best dark roses.

**Blanch Moreau (Moss Rose).** Pure white, large, full, of perfect form, and well furnished with deep green moss. Strong grower.

**Crester (Moss Rose).** Deep pink buds surrounded with a mossy fringe and crest; fragrant.

**Eugene Furst.** Velvety-crimson shaded crimson-maroon. One of the most beautiful.

**Frau Karl Druschki.** Pure white, large flowers, perfect in form. The handsomest white rose in cultivation.

**ROSES—Continued**

**Gen. Jacqueminot.** Large, velvety flowers of intense maroon-scarlet. Most popular rose grown.

**Gruss an Teplitz.** Blooms constantly during entire growing season. Reddest of all Red Roses. Exceedingly beautiful.

**Killarney.** Bright pink. Buds are long and of exquisite form and fragrance.

**White Killarney.** Same as Killarney in all respects except color. Pure white.

**Marshall P. Wilder.** Large, perfect, dark red flowers. One of the best.

**Mrs. J. H. Laing.** Satiny, soft clear pink. Best light pink rose.

**Paul Neyron.** Immense bright crimson-pink flowers. Blooms continuously. Largest rose known.

**Persian Yellow.** Deep golden yellow, semi-double flowers. One of the best.

**Soldier d'Or.** Dwarf, slow growing variety, hardy and very desirable yellow variety. Yellow shaded with orange or reddish gold, very double and exquisitely perfumed.

**Tom Wood.** Brilliant cherry red; large and very double, perpetual in bloom. Plant almost free from thorns. One of the most satisfactory red roses.

**Ulrich Brunner.** Brilliant cherry-red, immense flowers; handsome foliage. Superior to American Beauty as a garden rose as it is hardy, while American Beauty is not.

**CLIMBERS AND RAMBLERS**

**Baltimore Belle.** Pale blush, nearly white, very double; blossoms in clusters.

**Climbing American Beauty.** Glowing crimson-red. Beautiful glossy, green foliage which retains its brightness during the entire season.

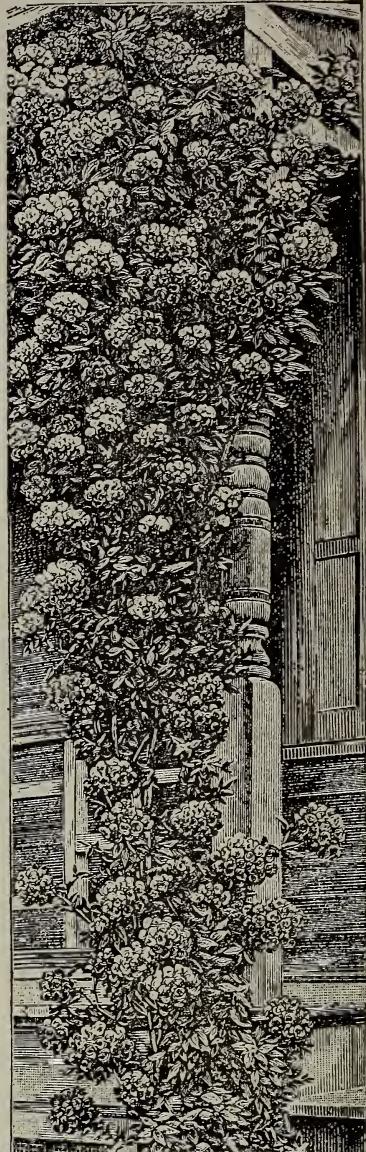
**Crimson Rambler.** Flowers rich crimson, borne in clusters. One of the fastest growing climbers. Handsome foliage. One of the best Climbing Roses.

**Dorothy Perkins.** Flowers clear shell pink, borne profusely in numerous clusters. Foliage lustrous, bright green. A grand rose.

**Excelsa** (Red Dorothy Perkins). Similar to Dorothy Perkins except color, which is an intense crimson-maroon.

**Prairie Queen.** Bright rose red. Fine grower.

**White Dorothy Perkins.** Similar in growth to Dorothy Perkins, except that it bears white flowers in profusion.



Crimson Rambler

**HEDGE PLANTS**

Nothing is more beautiful than a well-grown, neatly trimmed hedge. They are rapidly replacing fences and are very effective for protection and separation, besides being a delight to the eye. In starting a hedge, the plants should be set in two rows, a foot between the rows, and the plants set alternate, a foot apart in the row. Pruning should commence as soon as the limbs get large enough to form the required size of the hedge. Frequent pruning will cause the hedge to thicken up.

**California Privet.** Most popular and one of the very best Hedge Plants. Stands close trimming exceedingly well. Leaves, oval, dark green and glossy. Makes a very desirable hedge.

Per 10 Per 100

18 to 24 inches ..... \$0.50 \$4.00

2 to 3 feet ..... .60 5.00

3 to 4 feet ..... 1.00 9.00

**Berberis Thunbergi** (Thunberg's Barberry). A graceful shrub of low, dense habit. Leaves small, bright green, which in fall change to dazzling tones of orange, scarlet and crimson. Large, bright red berries appear in the fall and brighten the stems far into the winter. One of the most beautiful shrubs in cultivation. Makes one of the best hedges.

Each Per 10 Per 100

18 to 24 inches ..... \$0.35 \$3.00 \$25.00

We grow many thousands of American Arborvitae, Norway Spruce, Spirea Van Houttei and Spirea Anthony Waterer besides California Privet and Barberry Thunbergi for Hedge purposes. We shall be pleased at any time to communicate with any of our friends and customers who desire to plant Hedges. We can name some very attractive prices on any of these varieties for Hedging purposes.

**ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE**

## EVERGREEN TREES

Evergreens are excellent for specimens on the lawn, also for massing, shelters, hedges, etc. Our Evergreens have all been carefully grown, at distances which have allowed symmetrical growth. We ship them from September 1 to October 1, and from April 15 to May 15, which are the best seasons for digging and transplanting them. Some varieties stand transplanting better if dug with a ball of earth about the roots. If you wish your Evergreens to be balled, we charge from 5 to 15 cents extra for each tree, which covers the actual expense of labor in digging them, burlap and twine used on the ball.

**Arborvitae, American** (*Thuya occidentalis*).

Pyramidal shape; soft green foliage in spring and summer which changes to brown or bronze in winter. Rapid grower and fine for massing or hedges.

	Each	Per 10
2 to 3 feet .....	\$1.25	\$10.00
3 to 4 feet .....	2.00	.....
4 to 5 feet .....	3.00	.....

**Arborvitae, Pyramidal** (*Thuya occidentalis pyramidalis*).

Similar to American Arborvitae, but is much more compact in growth. Very beautiful.

	Each	Per 10
2 to 3 feet .....	\$2.00	\$17.50
3 to 4 feet .....	2.50	22.50

**Juniper, Irish** (*Juniperus communis hibernica*).

A slender, columnar tree; foliage deep green, very compact. Fine for formal planting.

	Each	Per 10
2 to 3 feet .....	\$2.00	\$18.00

**Retinospora Plumosa** (Plume-like Japan Cypress).

A rapid growing tree with fine, feather or plume-like foliage of a beautiful, soft green; may be rendered very dense by pruning. The most popular Retinospora.

	Each	Per 10
2 to 3 feet .....	\$2.25	\$20.00
3 to 4 feet .....	3.50	32.50

**Retinospora Plumosa Aurea** (Golden Japan Cypress).

A variety of the above especially attractive in the early summer when the young growth has the brightest golden hue.

	Each
2 to 3 feet .....	\$2.25
3 to 4 feet .....	3.50

**Spruce, Koster's Colorado Blue** (*Picea pungens glauca Kosteriana*).

A selected type of the Colorado Blue Spruce. Very beautiful bluish-green foliage; very vigorous and sturdy. One of the most valuable and distinct of all Evergreens.

No stock.

**Hemlock Spruce** (*Tsuga Canadensis*). A very graceful tree with loose open growth and Yew-like foliage. It can be pruned and kept in dense form. Does best in a moist soil. Beautiful when used for hedging or as single specimens.

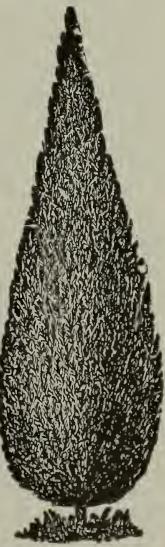
	Each	Per 10
2 to 3 feet .....	\$2.50	\$22.50

**Spruce, Norway** (*Picea excelsa*). A tall and grand tree of rapid growth. Most widely cultivated of the Spruces. Stands shearing very well, making a valuable evergreen hedge. It is widely used for windbreaks and makes a good Evergreen Tree for the lawn. We have an excellent stock of Norway Spruce in all sizes and will be pleased to quote in quantities.

	Each	Per 10
18 to 24 inches .....	\$0.75	\$ 6.00
2 to 3 feet .....	.90	7.50
3 to 4 feet .....	1.50	12.50



Norway Spruce



Irish Juniper

## ORNAMENTAL DEPARTMENT

A very small outlay of time and money, with a careful selection of Ornamental Trees and Shrubs, will add beauty and comfort to the home and increase its value many fold.

Please do not compare our trees and shrubs to the ill-shaped and cheap trees sometimes offered to the public for the purpose of getting rid of them. Each tree and shrub that we offer is carefully grown, dug and packed, and we solicit your patronage, knowing that you will be quick to appreciate high class, well-shaped ornamental stock.

We regret that space will permit us to give only very brief descriptions of Ornamentals, but we grow many other ornaments than those listed herein. Should you desire any other variety of tree or shrub or any other sizes than those given, we can probably supply you with same and any inquiries will receive our careful and prompt personal attention.



**EUROPEAN SYCAMORE (Oriental Plane Tree)**

### DECIDUOUS ORNAMENTAL TREES

**Ca' alpa, Western** (*Catalpa speciosa*). A large, rapid-growing tree, widely planted both as an ornamental tree and for lumber. Large heart-shaped leaves and white flowers with yellow and purple spots.

Each Per 10

8 to 10 feet ..... \$1.00 \$8.50

**Elm, American** (*Ulmus Americana*). A large, stately tree with long and graceful branches. Leaves dark green, turning pale in autumn. Excellent for lawn and landscape. One of the grandest trees.

Each Per 10

10 to 12 feet ..... \$1.75 \$16.00

We have American Elm in all sizes up to 4 inches in diameter.

**Horse Chestnut, White** (*Aesculus hippocastanum*). Large, handsome tree; dark green leaves; magnificent spikes of white flowers which appear in May. One of the best lawn trees.

Each Per 10

8 to 10 feet ..... \$2.50 \$22.50

We have Horse Chestnut in all sizes up to 5 inches in diameter.

**Catalpa Bungei** (Umbrella Tree). Leaves large, dark green, lying like shingles on a roof. Forms a dense umbrella-shaped head. Very unique and a valuable lawn tree.

Each Per 10

6 to 8 ft. stems, 2 yr. heads.... \$2.50 \$22.50

**Crab, Bechtel's Double Flowering**. Medium-size, hardy tree which when in bloom appears to be covered with small roses of delicate pink shade. Exceedingly fragrant.

Each Per 10

4 to 5 feet ..... \$1.50 -----

**Magnolia Acuminata** (Cucumber Tree). A fine pyramidal tree with upright branches. Leaves oblong, bright green, turning yellow in autumn. A valuable shade tree.

Each Per 10

6 to 8 ft. ..... \$1.75 \$15.00

**Magnolia Soulangeana**. Small tree which blooms in Spring. Flowers large, cup-shaped, white, striped with rose and pink, very fragrant. One of the most beautiful and showy trees grown. No stock.

**Maple, Norway** (*Acer platanoides*). Handsome tree with wide spreading branches, and a com-

## DECIDUOUS ORNAMENTAL TREES—Continued

pact, round head. Leaves smooth, bright green. A splendid lawn tree. We cannot recommend this tree too highly. We have made this tree a specialty and nurserymen and planters all over the United States know and buy our Norway Maples. We can furnish any size up to 4 inches in diameter.

	Each	Per 10
8 to 10 feet .....	\$1.75	16.50
1½ in. in diameter .....	2.50	.....
2 in. in diameter .....	4.00	.....
2½ in. in diameter .....	7.00	.....

**Maple, Silver** (*Acer dasycarpum*). A large tree with wide spreading and drooping branches. Leaves bright green above, silvery white beneath, turning pale in autumn. It is a very rapid growing tree and desirable when immediate shade is desired.

	Each	Per 10
8 to 10 feet .....	\$1.25	\$11.00
10 to 12 feet .....	1.75	15.00

We will be pleased to quote on larger sizes.

**Maple, Schwedlerii.** A beautiful variety of the Norway Maple with leaves of bright crimson color, changing to purplish green late in the autumn. One of the most valuable trees for contrast in foliage.

	Each
8 to 10 feet .....	\$2.50

**Prunus Pissardi** (Purple-leaf Plum). Handsome adornment for the lawn. This little tree has deep purple leaves which retain their color until fall. In spring, it is covered with fine white flowers followed by wine-red fruit.

	Each
4 to 5 feet .....	\$1.00

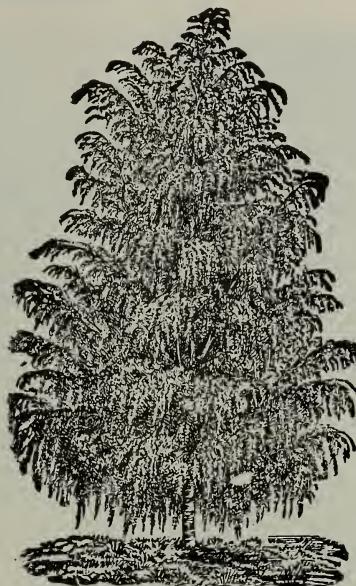
**Sycamore, European** (Oriental Plane). Erect growing, wide spreading tree; bright green, heart-shaped leaves; beautiful mottled trunk.

This tree is extensively used for park and street planting as well as for shade for the lawn. It is a healthy, fast growing tree; we consider it the best all-round fast growing tree for this part of the country.

	Each	Per 10
8 to 10 feet .....	\$1.25	\$11.50
10 to 12 feet .....	2.00	18.50

## WEEPING TREES

**Birch, Cut-leaf Weeping.** Probably the most popular of all weeping trees. Vigorous grower; graceful, drooping branches; silvery white bark



Cut Leaf Birch

and delicate cut foliage. Desirable for street or lawn.

	Each
5 to 6 feet .....	\$1.50
6 to 8 feet .....	2.00
2 to 2½ in. in diameter .....	6.00

**Maple, Wier's Cut-Leaved.** A variety of Silver Maple with finely cut foliage. Its growth is rapid; branches slender and drooping and as graceful as the Cut-Leaf Weeping Birch.

	Each
8 to 10 feet .....	\$2.00
10 to 12 feet .....	4.00

**Mulberry, Tea's Weeping.** One of the prettiest of all Weeping Trees. Grafted on stems about six feet from the ground and forms an umbrella-shaped head with long, slender branches, drooping to the ground.

	Each
2 year heads .....	\$2.50

**Willow, Wisconsin Weeping.** Probably the hardiest and best of the larger growing Willows. Very attractive.

	Each
6 to 8 feet .....	\$0.75
8 to 10 feet .....	1.00

We shall be glad to quote on large sizes or in greater quantities than those listed herein.

## PLANTING SUGGESTIONS

In order that you may better understand the various purposes for which different varieties of Ornamental Trees are best used, we have classified the most desirable varieties as follows:

**For Streets, Roads and Wide Avenues:** American Elm, European Sycamore, Silver Maple and Norway Maple.

**Large Trees Desirable for the Lawn:** Cut-leaf Weeping Birch, Horse Chestnut, Schwedler's Maple, Norway Maple, Wier's Maple, Weeping Willow.

**Small and Medium Ornamental Trees for the Lawn:** Catalpa bungei, Bechtel's Flowering

Crab, Magnolia soulangeana, Prunus pissardi, Tea's Weeping Bulberry.

**Fastest Growing Trees:** Oriental Plane (European Sycamore), Silver Maple, Wier's Cut-leaf Maple, Western Catalpa.

**Evergreen Best Adapted to Windbreaks and Screens:** American Arborvitae, Pyramidal Arborvitae, Norway Spruce.

## SPECIAL EVERGREEN OFFER

**EVERGREENS FOR WINDBREAK AND LAWN DECORATION**

**Strong, Heavy, Well Rooted Transplanted Stock  
For Express Shipment**

**Hardy Outdoor Spruces, Pines, Firs, Etc. Safe Arrival Guaranteed  
to Any Point in the United States**

**SPECIMEN EVERGREENS FOR LAWN DECORATION  
Choice, Rare Sorts of Exquisite Beauty**

A pair of Evergreen on either side of entrance, walk or drive, or a well arranged group in each corner of the front yard will bring a new beauty and charm to the home grounds. As ornamental trees Evergreens are unsurpassed. No other trees remain green throughout summer and winter; none are more beautiful. There is unquestionably no better way of beautifying a place than surrounding it with beautiful Evergreens.

**PRICES**

All Specimen Evergreens, Roots Balled and Burlapped for Spring Delivery Only

		Each	Pair
Colorado Blue Spruce (Shiners)	2 -3 feet B. & B.	\$12.00	\$20.00
Colorado Green Spruce	2 -3 feet B. & B.	10.00	18.00
Silver Cedar ( <i>Juniperus Glauca</i> )	2 -3 feet B. & B.	8.00	15.00
Pyramidal Arbor Vitae ( <i>Thuya</i> )	2 -3 feet B. & B.	8.00	15.00
Hemlock ( <i>Abies Canadensis</i> )	2 -3 feet B. & B.	8.00	15.00
Douglas Golden Arbor Vitae ( <i>Thuya</i> )	2 -3 feet B. & B.	8.00	15.00
Red Cedar ( <i>Juniperus</i> )	2 -3 feet B. & B.	8.00	15.00
Black Hill Spruce ( <i>Picea Canadensis</i> )	3 -4 feet B. & B.	13.00	25.00
White Spruce ( <i>Picea Alba</i> )	3 -4 feet B. & B.	10.50	20.00
Dwarf Mt. Pine ( <i>Pinus Mugho</i> )	1-1½ feet B. & B.	4.50	8.00
Dwarf Mt. Pine ( <i>Pinus Mugho</i> )	1½-2 feet B. & B.	5.50	10.00

For best results we always advise selection be left to us so we can select the best for your section.

**ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE**

## EVERGREEN FOR WINDBREAKS

Authorities figure that a good Evergreen Windbreak will add from \$2,000.00 to \$5,000.00 to the value of the average farm. An Evergreen Windbreak beautifies and protects, increasing in value each year. First cost is the only cost.

**Twice Transplanted, Twice Root-pruned. Strong, Thrifty Evergreen.**

### PRICES

	50	75	100	200
Large size, 1-1½ feet.....	\$ 26.00	\$ 38.25	\$ 50.00	\$ 98.00
Extra Large 1½-2 feet.....	39.50	57.75	75.00	146.00
Super Size 2-3 feet.....	53.00	77.25	100.00	194.00

### WINDBREAK VARIETIES

**For Spring Delivery Only**

\*Norway Spruce

\*Red Cedar

Jack Pine

Ponderosa Pine

\*Colorado Douglas Fir

Black Hill Spruce

\*Scotch Pine

White Spruce

\*White Pine

Starred sorts denote best varieties for certain soils and localities. For best results we always advise selection be left to us so we can select the best for your section.

**NOTE:**—The U. S. Dept. of Agriculture has prohibited the shipment of White Pine west of the west line of Minnesota, Iowa, Missouri, Arkansas and Louisiana. No orders accepted for White Pine west of that line.

### PLANTING DISTANCE FOR EVERGREEN WINDBREAKS

For best results plant Evergreens 10 feet apart in the windbreak row. If two or three rows are planted, space rows 10 feet apart, setting Evergreens alternately or zig-zag. An Evergreen Windbreak row 1,000 feet long will only require 100 Evergreens.

### TIME AND METHOD OF SHIPMENT

Windbreak, Hedge and Lawn Evergreens are shipped separately in the early Spring, during March, April or May, according to locality. Evergreens cannot be stored like Fruit and Shade trees. All Evergreens are dug, packed and shipped same day, insuring fresh, thrifty stock, full of life and vitality.

Our Evergreens are grown for us by one of the oldest and largest Evergreen nurseries in America. They grow nothing else. You can depend upon the quality.

**NOTE:**—All orders are shipped to your nearest Express office. Arrival at Express office in good order constitutes delivery. Purchaser pays all transportation charges.

Simple, easy, detailed Planting Instructions are sent with each shipment.

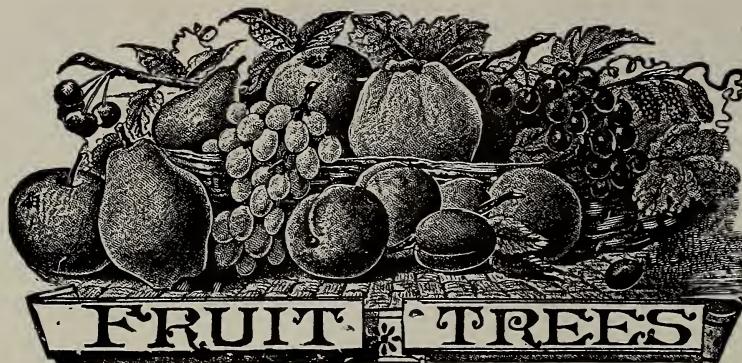
**Rate of Growth:** This depends entirely upon the variety. If left to us, we will select the variety that will grow fastest and best in your locality.

### PLEASE READ CAREFULLY

Orders must be confined strictly to sizes and varieties quoted above. 18 to 24 means not less than 18 inches and up to 24 inches. If 2 foot windbreak or hedge Evergreens are wanted, then the 2 to 3 foot size must be ordered.

**Rates:** Windbreak and Hedge Evergreens are tied in uniform bundles of 5 trees each of a single variety and size. Orders must be in multiples of 5. 50 to 70 at the 50 rate; 75 to 95 at the 75 rate; 100 to 195 at the 100 rate; 200 and over at the 200 rate.

# FRUIT DEPARTMENT



## CARE OF TREES AND PLANTS

When the Trees are received from the nursery, they should be examined and cared for at once. Do not delay. If they all cannot be set at once, the bundles should be opened and the trees separated, and heeled in the ground, so the moist soil will thoroughly cover the roots and exclude all air from them. Do not at any time expose the roots to the sun or air longer than is absolutely necessary. If they are dried from long exposure, bury them entirely in the ground or place them in water from twelve to twenty-four hours before planting.

Before any holes are dug, the land should be thoroughly plowed and the soil finely pulverized. It is best to have the field marked out and stakes driven where each tree is going to be set, so the trees will be absolutely in line. If the trees are to be set in the lawn or where the ground cannot be plowed, spade the ground for at least three feet in diameter and eighteen inches deep.

Just before planting, examine all the roots carefully and cut to a smooth surface any bruised or extra long roots with a sharp knife or pruning shears. It is best to trim all the roots somewhat.

The hole should be sufficiently large to admit all the roots without bruising or cramping and deep enough so the trees will stand one or two inches deeper than they stood in the nursery row. After the tree is placed in the hole, fill the hole about half full of top soil, then tramp down firmly. The top three or four inches of soil should not be tramped too firmly. Large or tall trees should be staked so the wind will not loosen the roots. If the soil is very dry, water should be poured into the hole after the hole is half filled with soil, then the dry soil should be placed on top.

Mulching with fine barnyard manure, sawdust, grass, weeds, or straw around the tree after it is set, not only helps shade the ground, but enriches the soil. Mulching keeps the soil from drying out and often spells the difference between success and failure when planting trees and shrubs.

Peach trees should be cut back from twenty-four to thirty-six inches from the ground and the side branches should all be cut off excepting four or five near the top and these should be cut back, leaving one or two buds on each branch to insure one good branch to form one of the four or five main or scaffold branches of the tree. Apples, cherries, pears, plums and quinces should be cut back to about four branches and these in turn should be cut back at least one-half. In all cases, avoid leaving branches where they will firm crotches.

If these brief directions are carefully followed, OUR trees will all grow.

### DISTANCES FOR PLANTING

Apples .....	30 to 36 feet apart each way.
Cherries .....	18 to 20 feet apart each way.
Peaches .....	16 to 18 feet apart each way.
Pears .....	18 to 20 feet apart each way.
Plums .....	16 to 20 feet apart each way.
Grapes .....	8 to 10 feet apart each way.
Currants .....	4 to 6 feet apart each way.
Gooseberries .....	4 to 6 feet apart each way.
Raspberries .....	3 to 4 by 5 to 7 feet each way.
Blackberries .....	3 to 4 by 5 to 7 feet each way.
Strawberries .....	1 by 3½ to 4½ feet each way.

### NUMBER OF TREES TO AN ACRE

30 feet apart each way .....	50
20 feet apart each way .....	110
18 feet apart each way .....	135
16 feet apart each way .....	170
10 feet apart each way .....	435
8 feet apart each way .....	680
6 feet apart each way .....	1210
5 feet apart each way .....	1742
4 feet apart each way .....	2723
3 feet apart each way .....	4840

**Rule.** Multiply the distance in feet between the rows by the distance the plants are apart in the rows and the product will be the number of square feet for each plant; which, divided into the number of feet in an acre (43,560), will give the number of trees to the acre.

**CRAB APPLES**

**Hyslop.** Large; purplish-red; popular variety. Grown in clusters.

First class, 2 years, 4 to 6 feet.....

**Red Siberian.** Medium; yellow with scarlet cheek; bears in clusters at an early age.

Each Per 10  
\$1.50 \$9.00

**CERRIES**

Cherries do well on soils too thin for almost any other fruit, but the finest fruit is obtained by growing them on deep, mellow, dry soil. In transplanting cherry trees, the roots should never be allowed to become dry before planting. When once established, they are exceptionally hardy and profitable. Sour varieties planted along roadsides not only make beautiful driveways, but yield very profitable crops. All varieties make desirable lawn trees.

**PRICES OF CHERRY TREES**

All Varieties, 2 years, 3 to 4 feet.....

Each Per 10  
\$1.00 \$10.00

**SOUR VARIETIES**

**Brassington.** We are the sole growers and distributors of this variety. It leads all others in size, quality and productiveness. It is dark red, sprightly, sub-acid and of the highest quality. It is very thrifty and an upright grower. The demand for these trees was so great last fall that we sold our entire stock of largest size trees and we regret that we can offer only 3 to 4 foot stock during the spring of 1918. This size will do well for you; in fact some large planters prefer it.

**Early Richmond.** Medium size; melting and juicy; unsurpassed for cooking purposes; dark red and very productive. June.

**English Morello.** Medium to large; deep red; rich and juicy. Best late sour variety. August.

**May Duke.** Large; red; flesh very juicy and rich. A good early variety. June.

**Montmorency.** Very large; red; flesh firm

and excellent; good keeper and one of the best shippers. Ripens about ten days later than Early Richmond.

**SWEET VARIETIES**

**Bing.** Very large; dark brown, nearly black; flesh firm, sweet, rich and delicious. July.

**Black Tartarian.** Very large; black; juicy, excellent flavored flesh. Very productive. Late June.

**Governor Wood.** Large; deep yellow, shaded red; very productive; excellent for canning.

**Napoleon (Royal Ann).** Magnificent cherry of large size; pale yellow with red cheek. Good for canning and shipping. July.

**Windsor.** Large; liver-colored; flesh firm and of highest quality; best late sweet variety. July.

**Yellow Spanish.** Large; yellow with red cheek. Very good variety. Late July.

**PEACHES**

Peach trees grow well on any soil not too wet, but they seem to do the best on a sand or gravel soil. No better Peach trees are grown than we grow here. In offering this list of varieties to you, we have been very careful to select only the hardest and most productive. We desire to call your attention to the Arctic Peach. This has proved to be the hardest Peach ever grown in this section.

All varieties described below are freestone varieties with the exception of William's Favorite. We do not believe a better list of varieties of peaches for this latitude can be offered to planters.

**PRICES OF PEACH TREES**

First class, 1 year, 4 to 5 feet high.....

Each Per 10  
\$0.70 6.50

**THE ARCTIC PEACH****The Hardest Peach Grown**

**Arctic.** Bears full crops where all others fail. It is a large, yellow, freestone of the finest quality, ripening October 1st. It has produced a full crop every year since its origin. To get the largest size fruit, it should be thinned in June. For a good canning peach, it is excelled by no other variety. If you wish peaches **every year**, plant **Arctic**. It will not fail you. Send your order in early for these trees, for the demand for a good, **hardy** peach is very heavy and although we have a large stock of trees in our cellars for spring delivery, we are sure that we will soon be sold out.

**Admiral Dewey.** Large; yellow flesh; fine texture; hardy and productive. July.

**Beer's Smock.** Large; yellow; oval shape; good bearer and shipper. One of the best market varieties. Late September.

**Capt. Ede.** Large; yellow; excellent quality. Very hardy. An improved Elberta. Ripens ten days earlier than Elberta.

**Carman.** Large; Elberta shape; pale yellow with deep blush. Skin very tough; flesh very tender. Good shipper. Very hardy and one of the best white varieties for market. August.

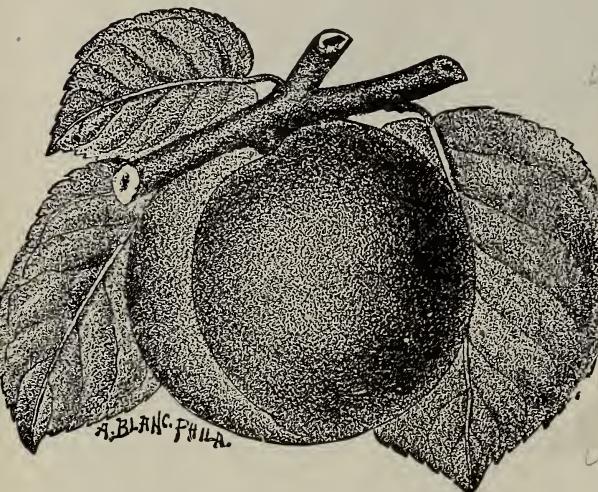
**Champion.** Similar to Carman in size, color and shape. Probably the best flavored early peach. Very hardy. For home use, we know of no better early peach. August.

**Crawford's Early.** Very large; yellow with red cheek; excellent quality. Early August.

**Crawford's Late.** Very large; yellow with deep red cheek; yellow flesh with red stone. Excellent flavor. Late September.

**Crosby.** Medium; very hardy; yellow, splashed with streaks of carmine. Abundant bearer. Excellent for canning. September.

**Elberta.** Too well known to need description. August.



Elberta Peach

**Fitzgerald.** Large; bright yellow, covered with red; flesh deep yellow; Canadian origin; very hardy; best quality. Early September.

**Gold Drop.** Medium size; golden color, both in flesh and skin, hardy and exceedingly productive; one of the very best canning peaches. September.

**J. H. Hale.** A widely advertised variety. Growth similar to Elberta. Fruit very large, globular; golden yellow covered with bright carmine. Flesh solid, yellow, excellent flavor. Fairly hardy.

**Lemon Free.** Large; color and shape of lemon; very hardy and productive. We know of no better all-round variety for home use. September.

**Prolific.** Large; flesh yellow, fine flavor; hardy and productive. A good orchard variety. September.

**Salway.** Large; flesh deep yellow, very rich and sweet. Good for canning and drying. Probably the best late sort. October.

**Stump the World.** An excellent, late, white, freestone variety. Last of September.

**William's Favorite.** A large, handsome and hardy cling variety. Excellent shipper. September 15.

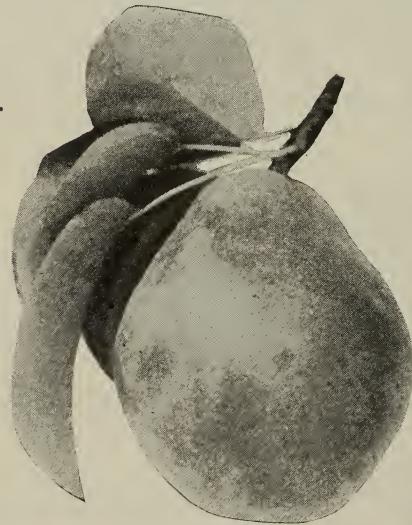
**Yellow St. John.** Large; round; fruit brilliant and showy; flesh yellow, juicy, sweet and fine flavor. One of the very best early varieties. August.

## PEARS

Pears succeed best in a rather hard, clay soil which will retard somewhat a too rank growth. This luscious fruit should receive more attention on the part of fruit growers. We are describing only the very best varieties. Varieties preceded by a star (\*) can be supplied as dwarf trees. Dwarf pears bear at an earlier age and are very desirable for small gardens, where space does not permit the planting of the standard or larger growing varieties.

### PRICES OF PEAR TREES

	Each	Per 10
First class, 2 years, 5 to 7 feet high .....	\$0.85	\$8.00



Bartlett Pear

## SUMMER PEARS

**\*Bartlett.** Large; smooth; juicy and excellent; good bearer and very desirable. August and September.

**\*Clapp's Favorite.** Large; similar to Bartlett in size, color and shape; ripens earlier. Productive. August.

**\*Wilder's Early.** Medium size; melting, sweet and pleasant flavor. One of the best in quality. Good keeping pear; does not rot at the core. August 1.

## AUTUMN PEARS

**\*Buerre d...jou.** Large; yellow with red cheek; fine grained; melting and excellent. Does best as a dwarf. October to November.

**\*Duchesse d'Angouleme.** Very large; dull yellow; rich, buttery, juicy and excellent. Does best as a dwarf. October to November.

**Flemish Beauty.** Large; greenish-yellow; sweet and rich. Excellent. September and October.

**Kieffer.** Very large; handsome; very productive; unexcelled for shipping and keeping. It is one of the best Pears for commercial planting or the home orchard. Probably the most satisfactory pears to plant in this section. October to December.

**Lincoln.** Clear yellow with red tinge; size and quality even better than Bartlett, which it resembles. Tree hardy, thrifty, long-lived and blight resistant. Not so well known or so widely planted as it should be.

**\*Seckle.** Small; yellowish-brown; russeted; very juicy, rich, buttery and fine-grained. One of the highest flavored pears grown. September and October.

**\*Worden Seckle.** Resembles Seckle, but is superior in size, color and shape. Good bearer and keeper.

## WINTER VARIETIES

**Lawrence.** Medium; light yellow sprinkled with dots; buttery, rich and aromatic. The best Winter variety.

## PLUMS

Plum Trees will succeed in almost any kind of soil. For home use, the poultry yard is an excellent place to plant plums; the trees furnishing shade and the poultry will pick up many insects.

### PRICES OF PLUM TREES

	Each	Per 10
First Class, 2 years, 5 to 7 ft. high.....	\$1.10	10.00

**Archduke.** Large; black; prolific; one of the best late plums for home and market. Early October.

**Abundance.** Large; yellow; fine quality; hardy and productive. This is a Japanese variety and one of the best. August.

**Bradshaw.** Very large; reddish purple; juicy and pleasant; entire freestone when ripe. Blooms late and seldom fails to bear a full crop. August.

**Burbank.** Medium to large; flesh deep yellow; firm and juicy; fine flavor; small pit. Excellent for table and canning. Bears very young and produces heavy crops. August.

**Fellenberg** (Italian or York State Prune). This variety is the largest, best and most widely grown Prune. Dark wine colored. Flesh firm, yellow, juicy, rich and very sweet. Most productive. Hardy and regular bearer and splendid for eating, canning and preserving.

**German Prune.** Medium-size; long; purple; flesh green; sweet; freestone; excellent qual-

ity and brings good prices on the market.

**Geuii.** Large; bluish-purple; flesh yellowish-green; sweet. September.

**Lombard.** Medium-size; somewhat oval in shape; violet red; juicy, pleasant and good. Very hardy and good. One of the very best varieties to plant. Do not fail to include some of these in your order. August.

**Reine Claude** (Bavay's Green Gage). Very large; greenish-yellow; fine flavor. Not surpassed in quality, beauty and size. September.

**Shropshire Damson.** Small; oval; dark blue; flesh very firm, green. Best for preserving. October.

**Wickson.** Very large; long; heart-shape; deep maroon red; flesh firm, meaty, rich, yellow, rich and aromatic. Good grower and shipper; an excellent Japanese market variety. Early September.

**Yellow Egg.** Very large; oval; deep golden; a showy market plum; excellent for canning.

## QUINCES

Quince trees can be planted on low, damp, heavy soils where other fruits do not thrive. They require little attention and are very profitable for market. No home garden is complete without a few quince trees.

### PRICES OF QUINCE TREES

	Each	Per 10
All Varieties, 4 to 5 feet .....	\$1.00	\$9.00

**Angers.** A free bearer of good size fruit, which keeps well.

**Champion.** Good bearer; very large; good keeper; very productive. Bears extremely

young.

**Orange (Apple).** Large; bright golden yellow; excellent flavor. Fine for domestic use. The standard variety. October.

## MULBERRIES

Valuable for shade and ornamental trees as well as for fruit. Birds are very fond of the fruit, and for this reason Mulberry trees are often planted near cherry orchards for birds will leave cherries alone if they can obtain Mulberries.

### PRICES OF MULBERRY TREES

	Each	Per 10
Downing's Everbearing, 4 to 5 feet .....	\$0.80	\$7.50
Russian, 4 to 5 feet .....	.60	5.50

**Downing's Everbearing.** Fruit very large, black, handsome and best quality. Bears abundantly for three months in a year.

**Russian.** Very hardy and a rapid grower. Fruit small, but produced in abundance; varies from white to black.

**ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE**

## NUT TREES

		Each	Per 10
American Chestnut, 4 to 5 feet .....		\$0.60	\$5.00
American Chestnut, 5 to 6 feet .....		.85	7.50
American Chestnut, 6 to 8 feet .....		1.00	8.50
Japan Chestnut, 2 to 3 feet .....		1.00	.....

**American Sweet Chestnut.** Native Chestnut.  
Our trees are grown from selected large nuts.

**Japan Chestnut.** Dwarf grower; very productive; bears nuts of immense size at an early age.

We have the best Tree Protector made. It is cut like veneer, 23 inches long, 8 inches wide and 28 to the inch in thickness. It affords perfect protection against mice and rabbits.

Prices, \$1.50 per 100; \$12.00 per 1,000.

We can supply budding, grafting and pruning knives, pruning shears, sprayers and any other equipment fruit growers or gardeners need. Write us for information in regard to any of these items.



## RASPBERRIES

Will do well on any good corn land. Keep well cultivated and free from weeds. As soon as the berries are all picked, cut out all the old canes, so the young shoots will grow vigorously for the next season's crop. Below is a list of the very best varieties.

## PRICES ON RASPBERRIES

		Per 10	Per 100
Cuthbert, Cumberland, Gregg, Kansas, Plum Farmer .....		\$0.75	\$6.00
Columbian, St. Regis .....		.85	7.50

## BLACK VARIETIES

**Cumberland.** Very vigorous; immense cropper; fruit very large, firm, excellent quality. Fine shipper and most profitable mid-season variety.

**Kansas.** Strong grower; stands drought very well; berries large, good quality. A good early variety.

**Plum Farmer.** Good bearer; thick meated, firm, excellent quality. Crop matures in a short period. One of the best varieties.

## RED AND PURPLE VARIETIES

**Columbian.** Purplish color, rather soft, of excellent color; excellent flavor and unrivaled. **St. Regis Everbearing.** A new variety whose main crop is equal to that of any other variety and one which bears fruit on the young shoots all summer until October. Color bright crimson; large, sweet; flesh meaty and very firm; a good shipper and very prolific. for canning, making jams, etc. Enormously productive.

**Cuthbert.** Very large; rich crimson, firm, sweet, rich. Leading red market variety.



Eldorado Blackberry

## BLACKBERRIES

For best results, plant in soil that does not dry out. Care should be exercised, however, not to plant in soil that is too wet or soggy. Keep the ground well cultivated or mulched so the moisture in the soil will be conserved. Prune same as Raspberries.

### PRICES OF BLACKBERRIES

	Each	Per 10	Per 100
Blower, Eldorado and Mersereau, strong root-cutting plants.....	\$0.20	\$0.50	\$10.00

**Blower.** One of the hardiest; enormously productive; highest quality; large; jet black and good shipper.

**Eldorado.** Very vigorous and hardy; berries very large; jet black, ripen together, very sweet, no core; excellent shipper and keeper. The leading variety.

**Mersereau.** Strong grower; hardy; productive, berries very large, fine quality, brilliant black, rich, sweet and unsurpassed as a shipper and keeper.

## GOOSEBERRIES

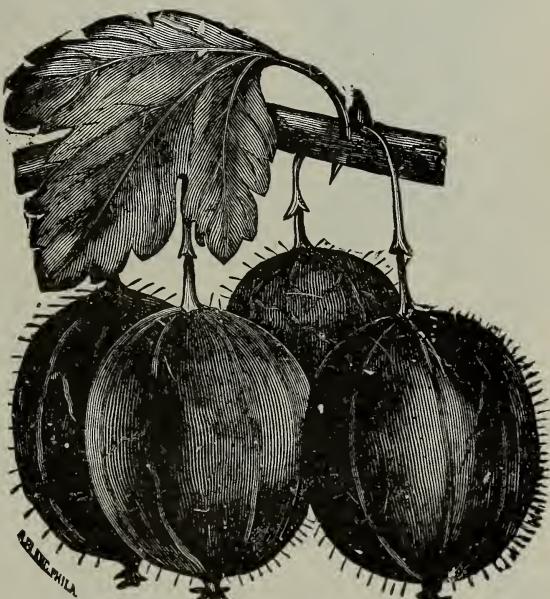
Should be planted in good, rich soil and fertilized every year. Regular pruning is essential for the production of good fruit. The red varieties are more susceptible to mildew than the green and should be grown in partial shade.

### PRICES ON GOOSEBERRIES

	Each	Per 10
Downing 2 years.....	\$0.40	\$3.50
Houghton, 2 years .....	.30	2.50

**Downing.** Very vigorous; fruit large, oval, whitish green; very valuable for home or market.

**Houghton.** Very productive; fruit medium, round, smooth; pale red; tender, sweet and delicious flavor. Seldom mildews. The best red variety for home or market.



Downing Gooseberry

## STRAWBERRIES

Strawberries will succeed in any soil that is ay appear. Ground should always be kept clean and should be thoroughly prepared to a good depth, welraw or some kind of litter will protect the plants. keep in hills, pinching runners off as soon as theod condition through the fruiting season. The well cultivated. In winter a covering of leaves, stdapted to ordinary farm or garden crops. Soil Mulching will keep the fruit clean and soil in a gl drained and enriched. To produce fine, large fruit, blossoms of those marked "(Imp.)" are destitute of stamens and are termed "pistillate," and unless a row of a perfect flowering variety is planted at intervals not exceeding about a rod, they will produce imperfect fruit and but little of it; but when properly fertilized, as a rule, they are more prolific than those with perfect flowers. Those marked ("Per.") are the perfect flowering sorts.

The following are the varieties most desirable for family use and market. Each and every variety enumerated has its special merits:

Dip the plants in water as soon as received and bury the roots in shady ground at once until ready to set out.

## STRAWBERRIES—Continued

All Varieties, except Superb and Progressive .....  
Superb and other Fall bearers .....

	Per 25	Per 100	Per 1,000
	\$0.50	\$1.00	\$ 9.00
	.75	2.00	15.00

**Brandywine** (Per.)—Season medium to late. One of the grandest berries ever introduced. It is one of our favorites. It is one of the heaviest fruiters and a splendid shipper. Berries very large, deep red to center. Stems short and stout and holds its great load of berries well up from the ground. One of the strongest pollinizers for pistillates of the season.

**Bubach** (Imp.)—Combines many excellent qualities, such as great and uniform size, fine form and color, good quality of fruit, unsurpassed productiveness and great vigor of plant. It ripens almost as early as the Crescent and continues about as long in bearing, and fully as prolific; leaves large, dark green, and endure the hottest sun perfectly. The leading market variety. Succeeds best on heavy soil.

**Dunlap** (Senator Dunlap) (Per.)—Medium to large, flattened slightly. Dark crimson. Flesh red, firm and fine in texture. Quality excellent. Planty hardy and strong grower.

**Excelsior** (Per.) Another early sort of great promise from Arkansas. It is an excellent grower of good, clean foliage, making large, stocky plants, which is one of the main business qualifications of the strawberry. Earlier by several days than Michel's Early. It does well on light sand or heavy land. The berry is dark red, nearly as dark as Warfield; of good size; one of the best shippers; will stand as much handling as the old Wilson without bruising. It is a good plant maker, medium in size and perfectly healthy; blossom perfect.

**Glen Mary.** Very large, firm, very productive and a good shipper; berries are liable to have white tips.

**Gandy** (Per.) Unsurpassed in growth and healthfulness of foliage. Berries bright crimson color, uniform size and shape, large, ripen late and are very firm. Produces a crop of berries the first season plants are set. Latest of all. A profitable market sort.

**Haverland** (Imp.) The most productive large berry under cultivation. Season medium early until late. Plants are very large, healthy vigorous, and ripen their fruit evenly and early, holding on through the season. Berries are fine, uniform in shape, very large; excellent flavor and bright red.

**Jessie** (Per.) On moist soil is a robust, healthy plant; long, stout fruit stalk, holds the fruit well up from the ground; berries of the largest size; medium to dark red all the way of the largest ones of irregular shape. Season through; firm and solid, and of the most excellent quality; very few small berries and none medium.

**Michel** (Per.) Long been known as the extra early berry. It should always be grown in hedgerow, when it is very productive. It makes runners very freely, and many have propagated in beds so thickly that light was excluded and thus it lost its tendency to form fruit buds. Berries medium size, cone shape and a good shipper.



Strawberry—Senator Dunlap

**Sample** (Imp.) Large size; midseason, fine quality; conical shape and regular in form. One of the best for market.

**Warfield** (Imp.) The greatest market and shipping berry. A deep rooter and can mature an immense crop; berries above medium in size, dark red to the center, and one of the best canning and shipping berries grown.

**William Belt.** Large size; bright red color and prime quality; handsome and firm. Very popular market sort in this section.

### EVERBEARING STRAWBERRIES

These are no longer an experiment when properly handled. To do best, the strawberry needs plenty of water and to obtain the largest size and fine quality of fruit in the fall keep blossoms picked off until about the first of August.

We have tried all the leading sorts and after thorough trial we have discarded all but two varieties. These are both good, but in our opinion, the Progressive is superior.

**Progressive.** Good size, smooth and of good red color. The plants are vigorous and healthy. Fruits from the middle of August until the middle of November, according to season.

**Suburb.** Fruit large, round, rich dark colored, glossy, attractive. Plants hardy and healthy. Fruits from August 15th, to November 15th, according to season.

## CURRENTS

Currants do best when planted in rich ground; cultivated well or mulched heavily. The old wood should be pruned out each year after the third year so the remaining shoots will have room to grow. Currants are easily cultivated, stand neglect well and respond liberally to generous cultivation. They are indispensable for table use, jellies, jams, etc.

### PRICES OF CURRENTS

		Each	Per 10
Perfection,	2 years.....	\$ .40	\$3.50
Red Cross,	2 years.....	.35	3.00
Wilder,	2 years.....	.35	3.00

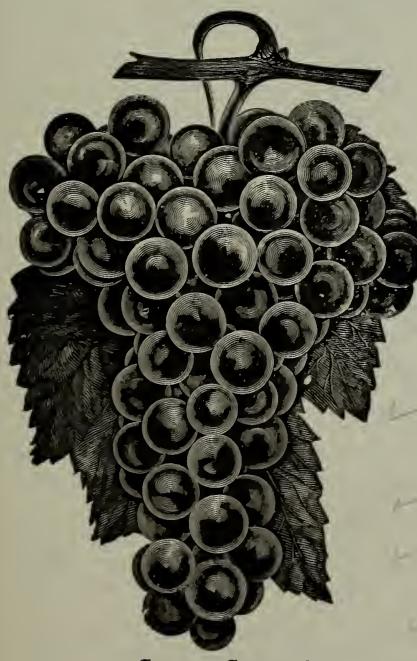
**Perfection.** This is a cross between Fay's and White Grape, retaining the valuable characteristics of both. It is larger than Fay's, the berries holding their size to the end of the bunch. It is a great bearer, superior to any other sort. We consider this the very best variety ever offered. Bright red.

**Red Cross.** Very large; clusters long; berries red and of same size to the end of the stem. The sweetest currant and excellent for home or market.

**Wilder.** The strongest and one of the most productive. Bunches and berries very large; bright, attractive red color. We recommend this variety for any purpose.



Perfection Currant



Grape--Concord

## GRAPES

Grape Vines do well trained up to the side of any building or along the garden. Grapes are very profitable for certain localities and they are so easily grown and bear at such an early age and the plants are so inexpensive that they should receive greater attention. We are in the center of one of the first grape belts in the United States and are in a position to supply the finest plants. Any one contemplating planting grapes in large quantities will profit by communicating with us.

### PRICES ON GRAPES

		Each	Per 10
Brighton,	2 years.....	\$0.45	\$4.00
Concord,	2 years.....	.35	3.00
Niagara,	2 years.....	.40	3.50

### BLACK

**Concord.** Bunch and berry very large; color blue-black. Very hardy and productive. Probably the best all-around grape grown.

### RED

**Brighton.** Berries large, round, excellent flavor and quality. One of the earliest.

**Catawba.** Coppery-red, vinous and rich.

### WHITE

**Niagara.** The standard white grape for home and market. Pale yellow; flesh tender and sweet; skin thin but tough. An excellent shipper.

## APPLES

Apples grow well on any good soil, not too wet. Rough, hilly portions of the farm, when planted to apple trees, often become the most productive parts of the farm. Our trees are grown here in our nurseries and no stronger, better rooted or better matured trees are to be had. We have described only the leading varieties, but we grow and can supply any variety of merit. By making a judicious selection, you can have apples nearly the whole year.

### PRICES OF APPLE TREES

	Each	Per 10
First class, 2 years, 5 to 7 feet high .....	\$0.85	\$8.00
First class, 2 years, 4 to 5 feet high .....	.75	7.00

### SUMMER APPLES

**Golden Sweet.** Large, yellow, sweet and tender. A good grower and very productive. August.

**Red Astrachan.** Large, deep, crimson, good quality. A popular and productive, early market variety. July.

**Sweet Bough.** Large, yellow and very sweet. Extra good for dessert. Regular bearer. August.

**Yellow Transparent.** Medium size, white, tender and juicy. Bears in from two to four years. July.

### AUTUMN APPLES

**Duchess of Oldenburg.** Large, yellow, streaked with red; juicy, very productive. Bears at an early age. September.

**Gravenstein.** Very large, striped red, fine quality. Very popular variety. September to October.

**Lowell (Greasy Pippin).** Large, bright yellow with oily skin. Rich acid flavor. September.

**Maiden Blush.** Medium, smooth pale yellow with red cheek, tender. Bears at an early age and is very productive. September to October.

**Munson Sweet.** Medium size, yellow with red cheek; good fall sweet apple. September.

**Wealthy.** Medium, whitish-yellow, shaded with deep crimson, flesh white, prolific and bears at an early age. This variety bears in the fall and keeps well to February. One of the most valuable market varieties grown.

**Western Beauty.** Large, round, yellow shaded with carmine, excellent quality.

### WINTER APPLES

**Bailey Sweet.** Large, oblong, deep red, tender and delicious. November to February.

**Baldwin.** Large, bright red, prolific. One of the best and most popular varieties grown. December to March.

**Belmont (Gate).** Good size, yellow skin, somewhat oily, of very high quality and deserves a place in every home orchard.

**Ben Davis.** Medium size, red striped, rather coarse grained, good market variety, sure cropper. December to April.

**Delicious.** Large, brilliant red, flesh very fine, crisp and highly aromatic. November to March.

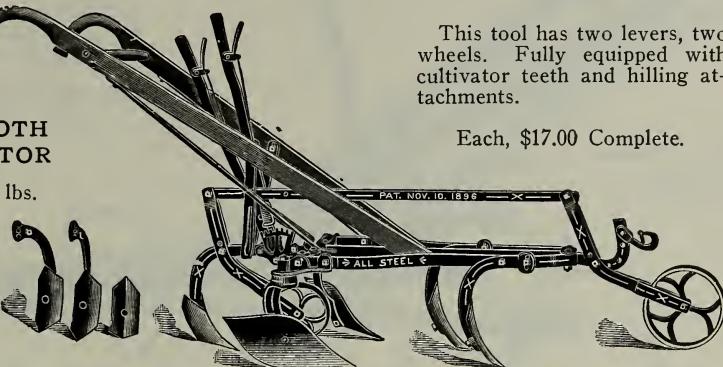
- ✓ **Fameuse (Snow).** Medium, deep crimson skin, flesh snow white, best quality. November.
- ✓ **Grimes' Golden.** Good size, yellow, crisp and juicy. Very productive and of the highest quality. January to April.
- ✓ **Golden Russet.** Medium size, dull russet, red tinge; tree very hardy and large, sure cropper. February and March.
- ✓ **Hubbardson Nonesuch.** Large, round, pale red. Flesh tender and crisp. Good grower and bearer and should be widely planted. Comes into bearing early. November to January.
- ✓ **Jonathan.** Medium, yellow with red stripes; flesh white, tender, juicy and rich. One of the best for table and market. Very productive. November to March.
- ✓ **King.** Very large, red striped, yellow flesh. One of the best Northern varieties. November to January.
- ✓ **McIntosh Red.** Large, deep crimson, very attractive; valuable for home and market. November to April.
- ✓ **Northern Spy.** Greenish-yellow, striped with red, late keeper; rich, delicious and one of the finest flavored apples ever grown. January to May.
- ✓ **Rhode Island Greening.** Greenish-yellow, large and round. Flesh yellow, fine grained, tender, crisp and juicy; fine for cooking. November to March.
- ✓ **Rome Beauty.** Large and beautiful; yellow shaded and striped with red; flesh white, tender, crisp and juicy; very profitable for market and fine for home use. December to February.
- ✓ **Roxbury Russet.** Large, round, yellow covered with russet. Good flavor and especially recommended for kitchen or market. Very hardy and productive. December to May.
- ✓ **Tolman Sweet.** One of the best sweet, winter apples. December to March.
- ✓ **Stayman's Winesap.** An improved Winesap, but larger and more prolific. A good market variety. November to February.
- ✓ **Wagner.** Medium, dark red; mild, tender and excellent. Very prolific and bears at an early age. December to March.
- ✓ **Winter Banana.** Fancy market variety; well formed; yellow shaded with red; flesh yellow, with rich, aromatic banana flavor. Good grower and bearer. Fruits in the fourth year. December to April.
- ✓ **York Imperial.** Medium; white, shaded with crimson; flesh firm, crisp and juicy. November to February.

## IMPLEMENT DEPARTMENT

No. 21

## FIVE-TOOTH CULTIVATOR

Weight 80 lbs.



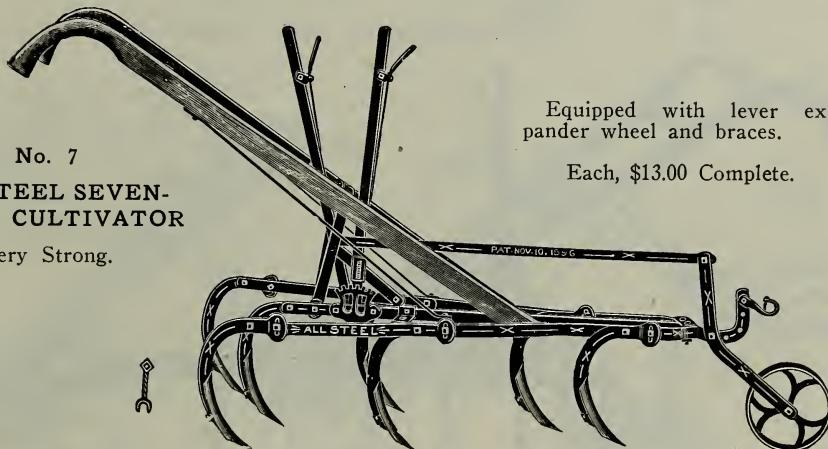
This tool has two levers, two wheels. Fully equipped with cultivator teeth and hill ing attachments.

Each, \$17.00 Complete.

No. 7

## ALL-STEEL SEVEN-TOOTH CULTIVATOR

Very Strong.

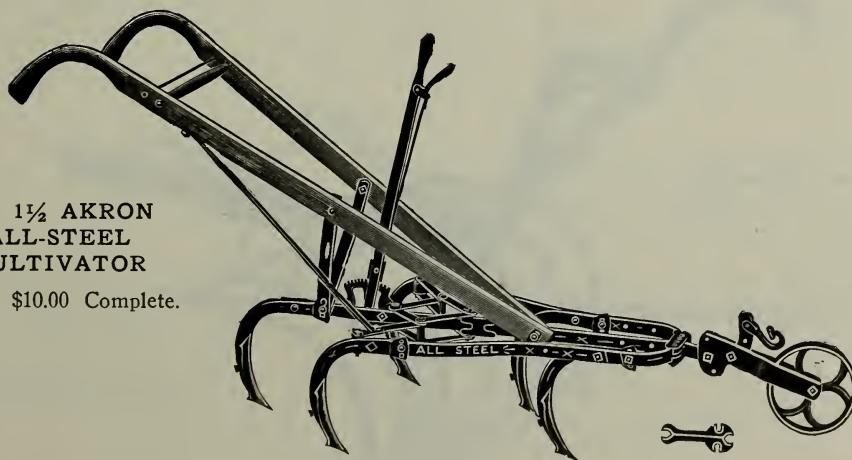


Equipped with lever expander wheel and braces.

Each, \$13.00 Complete.

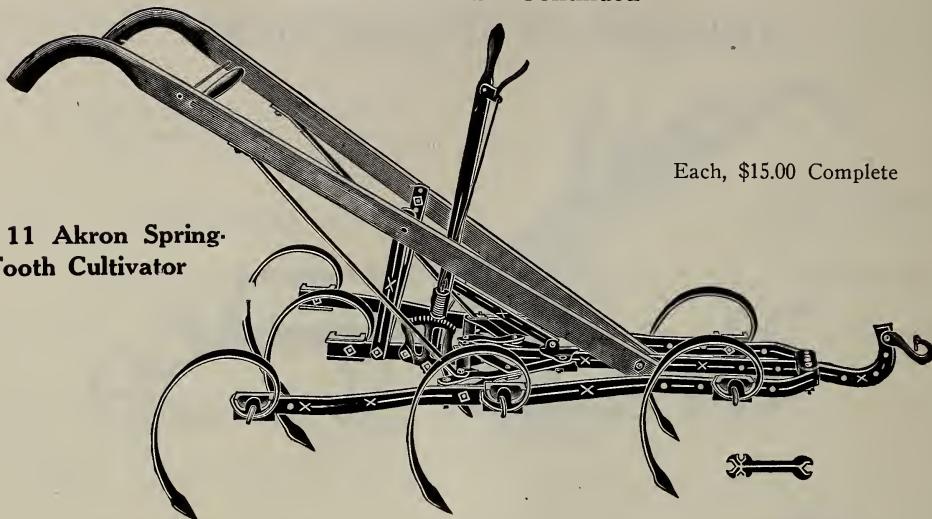
## No. 1½ AKRON ALL-STEEL CULTIVATOR

Each, \$10.00 Complete.



With Lever Expander, Outside Handle Braces and Plain Wheel. Weight, 60 lbs.

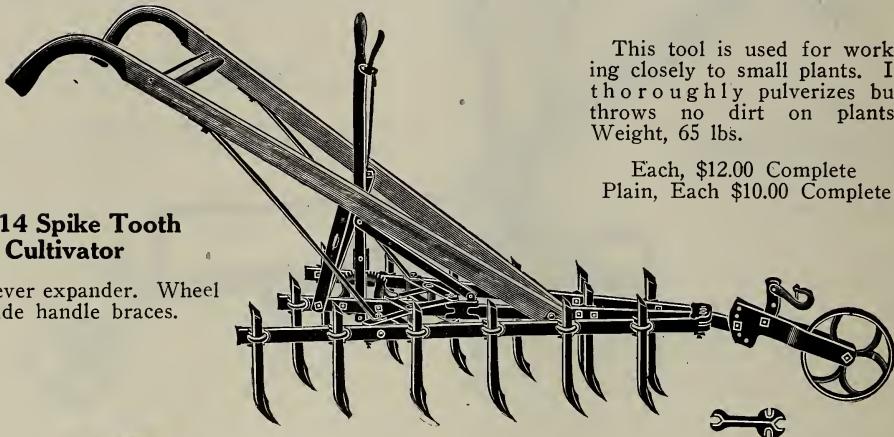
## IMPLEMENTS—Continued



Each, \$15.00 Complete

**No. 11 Akron Spring-  
Tooth Cultivator**

These Spring Teeth may be set at any angle. Weight 53 lbs.

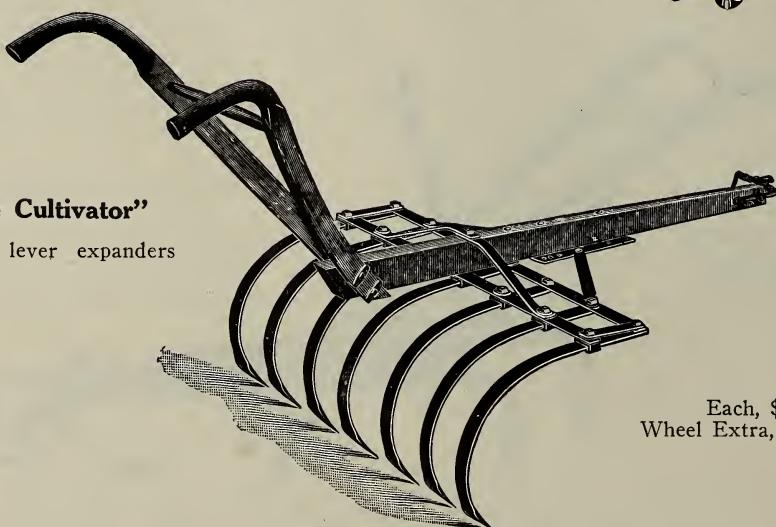


This tool is used for working closely to small plants. It thoroughly pulverizes but throws no dirt on plants. Weight, 65 lbs.

Each, \$12.00 Complete  
Plain, Each \$10.00 Complete

**No. 14 Spike Tooth  
Cultivator**

With lever expander. Wheel and outside handle braces.



Each, \$12.50  
Wheel Extra, \$1.50 Each

An all-around tool for farmer and market gardener. Will do all of the work of a one-horse cultivator. Can be used either right or left handed.

## IMPLEMENTS—Continued

**No. 1 Akron  
Double Shovel  
Plow**

Steel Beam  $1\frac{1}{2} \times 5\frac{1}{8}$ ".  
Weight, 34 lbs.



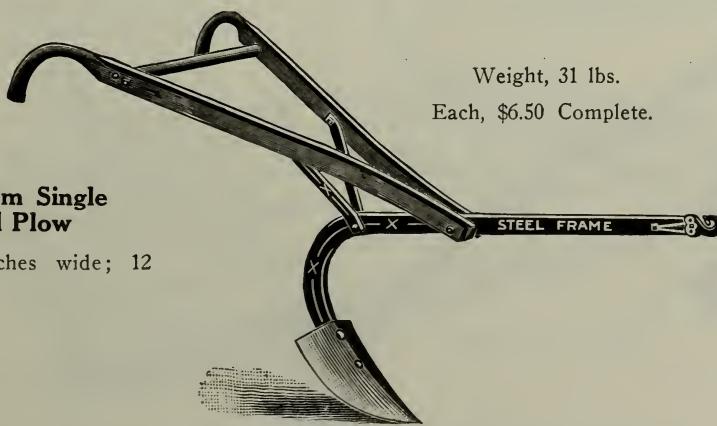
Each, \$7.00 Complete

**Akron**  
one-wheel garden plow.  
Complete, \$5.50 Each**Wing Shovel Plow**  
Solid Steel Beam.

A first class tool.  
Each, \$7.50 Complete

**Steel Beam Single  
Shovel Plow**

Blade 10 inches wide; 12  
inches long.



Weight, 31 lbs.  
Each, \$6.50 Complete.

## IMPLEMENTS—Continued

**A "Steel-Forged" Cultivator  
for the Man Who Wants  
the Best**

G-1

Each, \$14.00



Equipment includes 2 scuffle Hoes, 4 Cultivator Teeth, 2 Plows and Steel Wrench, packed in wooden box. Handles wired in pairs and papered. The Midget Seeder may be attached by means of a special attachment plate.

**An Entirely New Cultivator with Permanent Attachments**

The True Temper G-2 is the latest design in the cultivator field. It combines three tools in one and has this very marked advantage over the ordinary type of cultivator—you can't lose the attachments because they are permanently attached to the frame, and you don't have to look for a wrench. A few turns of the hand wheel releases one set of tools and allows another to be revolved into working position and locked securely in place.

The equipment consists of a thin blade scuffle hoe 9 inches wide, a well formed plow and five adjustable "Invincible" cultivator teeth.

The Midget Seeder may be used on the G-2 by removing the center casting with all tools, and inserting a special casting.

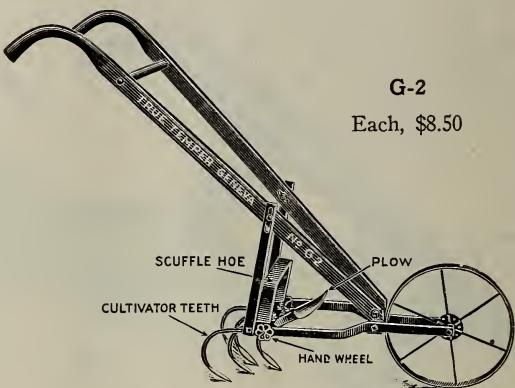
Has 14-inch Steel Oval Spoke Wheel with 1¼-inch tire. Selected oak handles, bent.

Weight, complete, 20 pounds.

Metal parts packed in crate, handles wired in pairs and papered.

G-2

Each, \$8.50



**The Most Popular Little Seeder on the Market**

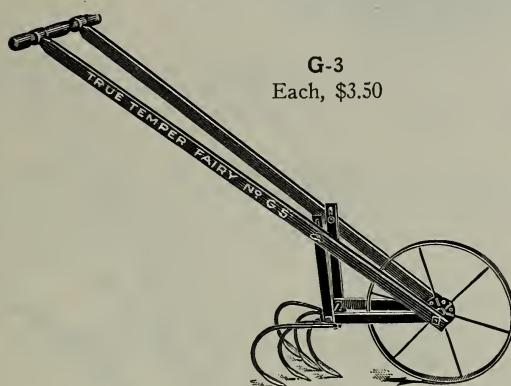
Seed Attachment Only  
\$5.00 each



The Midget Seeder is the handiest seeder in use. It is inexpensive, very simple to operate and drills almost any kind of seeds from the smallest up to peas and beans, getting in just the right amount. There is an index on top that names the seeds and regulates the opening for the different sizes.

The Midget is all metal construction and it will last for a long time. It is, however, extremely light and easy to lift about or to empty. The shoe is adjustable for any depth and the coverer swings free. It is entirely set up and ready for use when it leaves the factory.

The Midget may be easily attached to almost any wheel cultivator.

**New Double Handle Spring Tooth Hand Cultivator**

**G-3**  
Each, \$3.50

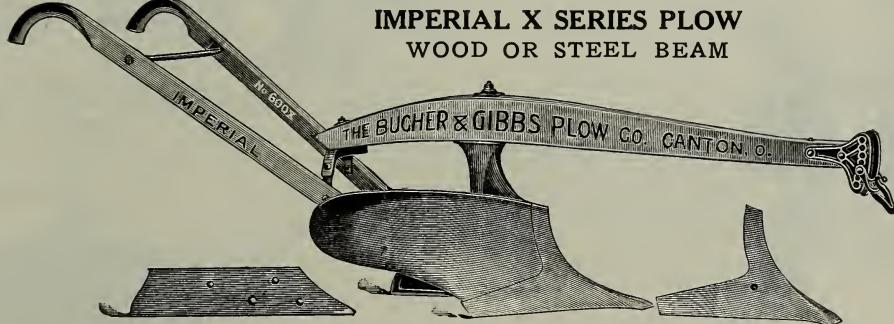
**This Tool-Steel Blade Makes Cultivating Easier**

**A-3**  
Each, \$3.50



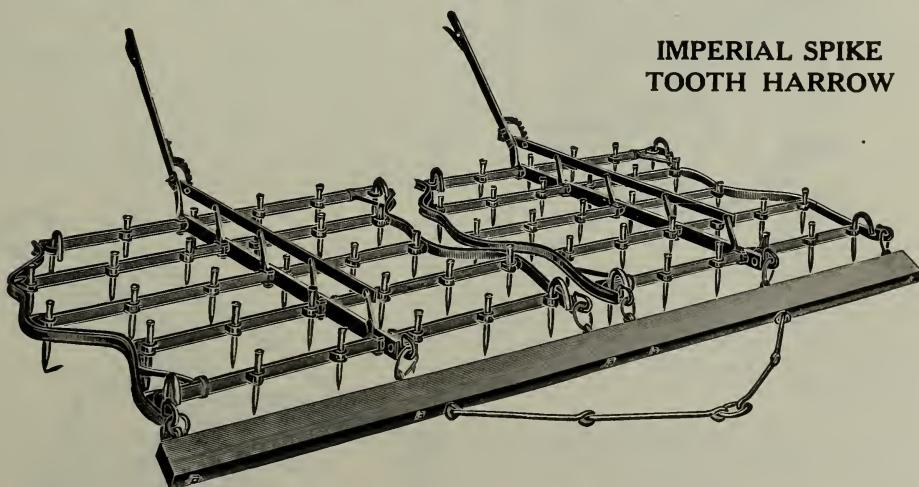
The True Temper A-3 Cultivator has been carefully designed to do its work with the least effort. The blade is V-shaped, 8 inches wide, which gives it a razor-like draw cut that goes through the soil and cuts off the weeds a great deal easier than the ordinary blade.

The Midget Seeder may be easily attached to the A-3 and operates very successfully.

**IMPERIAL X SERIES PLOW  
WOOD OR STEEL BEAM**

The Imperial Plow is exactly suited to Northern Ohio conditions. It has a thin cutter share with gradually sloping breast, a long and high moldboard and a long, perpendicular landslide. Equally good for all sod or stubble plowing.

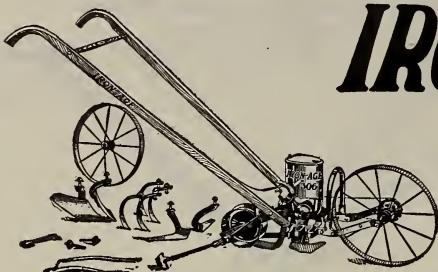
All Sizes in Stock—Ask for Prices

**IMPERIAL SPIKE TOOTH HARROW**

The frame of this Harrow protects it against damage from trees, stumps, or fences, and prevents trash gathering on the ends of the tooth bars. The teeth are full eight inches long, headed and pointed, and attached by our patented tooth clips.

**ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE**

# IRON AGE



No. 306, Combined. Complete \$22.00

makes cultivation easy. Sowing is accurate, is done when you see it, and you can sow as thick as your experience tells you is right. Market gardeners use the plain drill furrow of this tool, No. 7, with special plows for onions, etc. No. 306 includes all of the tools shown with it.

No. 301 Double and Single Wheel Hoe is part of No. 6, but is sold separately. With it you can hoe, weed, cultivate, ridge growing crops, open furrows and cover them. Steel tube frame, 16-inch steel wheel, tools adjustable for width row.

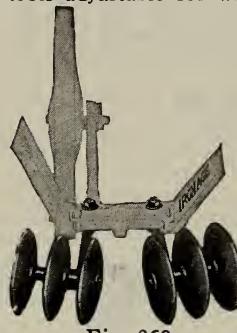
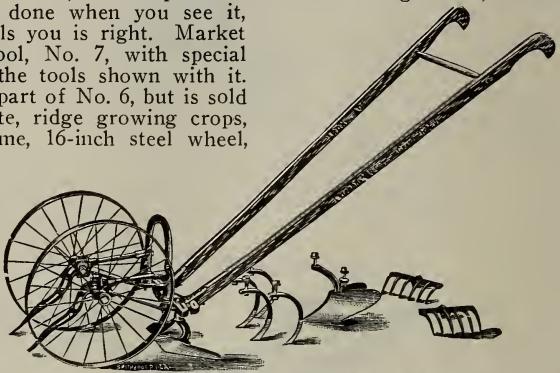
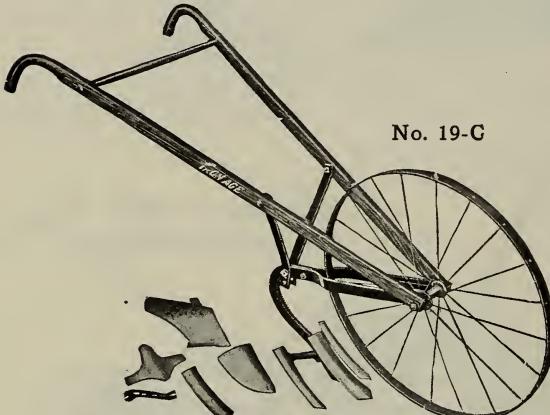
Fig. 369  
Disc Cultivating Attachment

Fig. 369 shows disc cultivating attachment. It can be applied to No. 1 Wheel Hoe.

No. 301, Double and Single Wheel Hoe.  
Complete \$12.00

No. 19-C Wheel Cultivator is a good tool for use in cultivation only. Has 24-inch steel wheel and special cultivator tools, including landside plow.



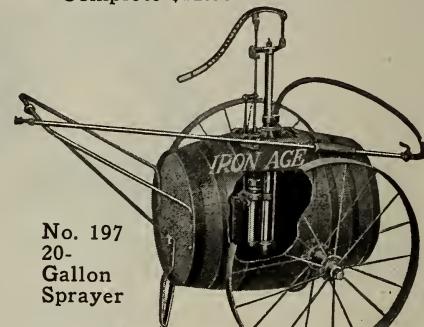
Complete \$6.50

No. 600-EL Hoe and Cultivator is a standard type for one horse. Long, high steel frame. Expands 30 inches and closes to 14. Sold in simpler forms if wanted.

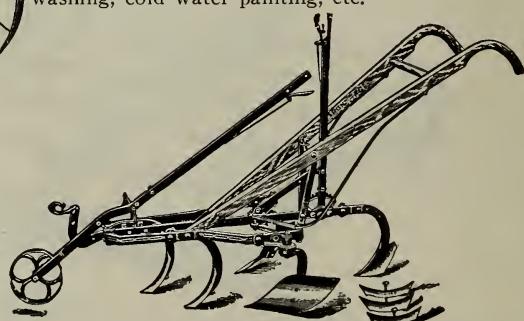
Ask for Iron Age Booklets describing these and other lines of farm, garden and orchard tools.

Modern gardens are made in long, straight rows with just enough ground between rows to grow the crop properly. Modern garden tools have made this possible.

No. 306 Combined Hill and Drill Seeder, Double and Single Wheat Hoe, will open its own furrow, sow any kind of small seed in hills or continuous rows, cover and pack it and mark the next row, all in operation and in a straight row, which

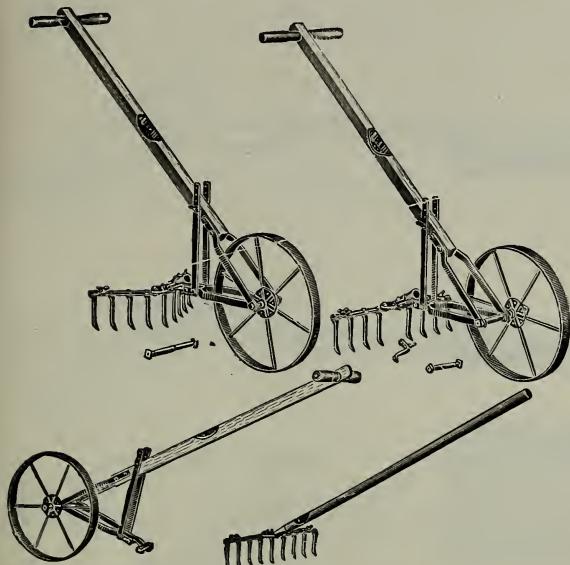
No. 197  
20-  
Gallon  
Sprayer

No. 197 Sprayer is a complete outfit with detachable brass pump mounted in 20-gallon barrel on steel truck, with 4 feet of steel pipe. Easy to clean and repair. Will spray any kind of solutions and keep them mixed properly in the barrel. Good for spraying, whitewashing, cold water painting, etc.



No. 600-EL Complete \$13.75

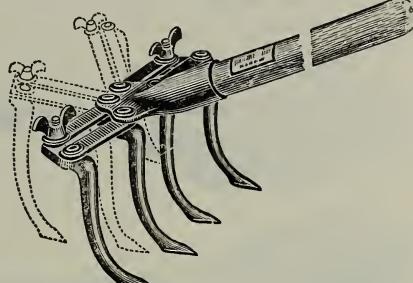
# PULL-EASY



No. P-E-W

**Pull-Easy Wheel Cultivator Combination**

Use either with or without wheel.  
Each, \$3.00

ADJUSTABLE  
2" TO 6" WIDE

No.—PEJ1. Short handle

Handle—Polished hardwood, 10 in. long.

Teeth—4—3 in. long, channeled steel—enameled blue.

Adjustment—2 in. to 6 in. wide.

Retail Price—60 cts. each.

No.—PEJ4. Long handle

Handle—Polished and varnished hardwood 4 ft. long.

Teeth—Same as PEJ1—riveted to parallel bars—instantly adjustable 2 in. to 6 in. wide.

Retail Price—75 cts. each.

No.—PEW2

**H**andles—Double Handle style.  
Maple—enameled red with black grips. 4½ ft. long.

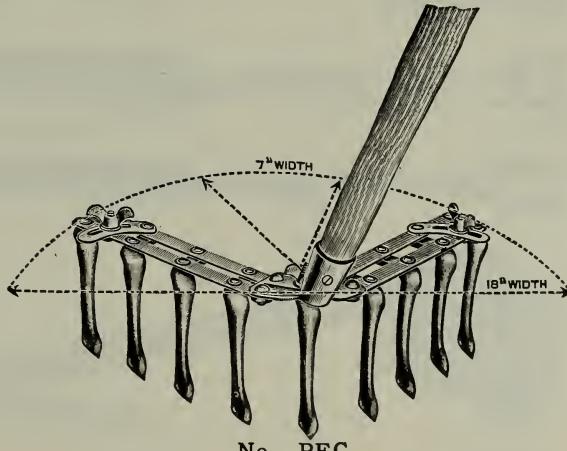
**W**heel—Electric welded—14 in. diameter—1 in. rim.

**C**ultivator—Same as our PEC style, adjustable 7 to 18 in. wide.

**W**eed Slayer Knife—9½ in. wide—  
No. 12 gauge, high carbon steel.

**F**rame—Material used is 1 in. x No. 10 gauge hard steel.

**R**etail Price—\$4.00 each.



No.—PEC

**H**andle—Finest quality ash, shellacked and polished.  
Kraft paper wrapped.

**S**teel Parts—High carbon steel, sturdy enough for the roughest use. Teeth (9) cold pressed. 3 in. long, enameled blue.

**A**djustable—Minimum width 7 in., maximum width 18 in. Middle tooth removed by loosening thumb nut.

**R**etail Price—\$1.50 each.

**Pull-Easy Rocker Hoe**

Each, \$1.00

**ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE**

## HOES, SPADES, SHOVELS, ETC.

**Clover Fork**

Best—4 Tines .....	Each \$1.50
Best—6 Tines .....	Each 2.00

**Manure Fork**

Best—8 Tines .....	Each \$2.25
Best—10 Tines .....	Each 2.65

**Round End Shovel**

Best—D-Handle .....	Each \$1.75
Best—Long Handle .....	Each 1.85

**Square End Shovel**

Peerless .....	Each \$1.75
Forest City .....	Each 1.50
Dennis .....	Each 1.50

**Spades**

Peerless .....	Each \$1.75
Forest City .....	Each 1.50
Dennis .....	Each 1.50

**Drain Spade**

Forest City .....	Each \$1.75
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**Ditch Spade**

Forest City .....	Each \$1.75
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**Garden Hoe**

Clear Cut .....	Each \$1.25
No. G. O. 7 .....	Each 1.00
R. O. A. .....	Each .65

**Lady's Hoe**

Best Steel .....	Each \$.85
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**Heart Shaped Hoe**

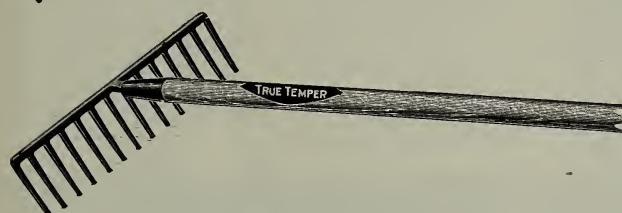
No. W—7 in. .....	Each \$1.00
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**Garden Rakes**

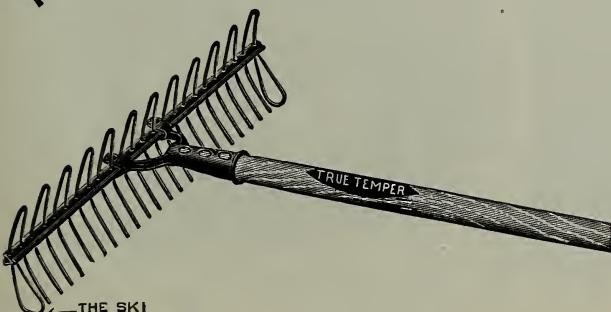
Bow End ..... Each \$1.25

**Garden Rakes**

All Steel ..... Each \$.85

**Garden Rakes**

Malleable Iron ..... Each \$.60

**Wire Lawn Rakes**

Each ..... \$.65

**Spading Forks**

Best ..... Each \$1.75

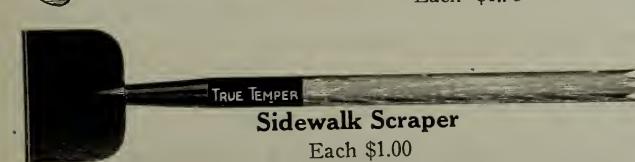
Medium ..... Each 1.50

**Jackson Weeding Hoe**

Each ..... \$.85

**Sod Lifter**

Each \$1.75

**Sidewalk Scraper**

Each \$1.00

Galvanized Iron  
Each \$1.35Wooden  
Each \$.60

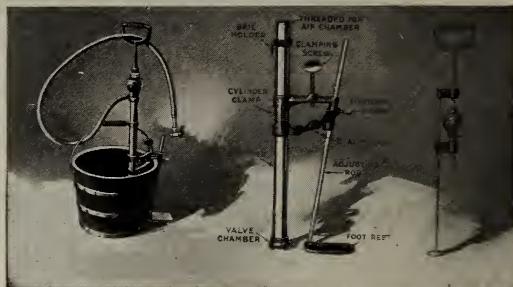
ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

## DEMING'S SPRAY PUMPS

We carry a full line of Repairs and Parts for Deming Spray Pumps



No. 675. The "Success" Knapsack Sprayer. Has a 5-gallon copper tank, a brass pump with bronze ball valves and extra wide straps. Brass, each, \$24.00; Galvanized, each, \$16.00.



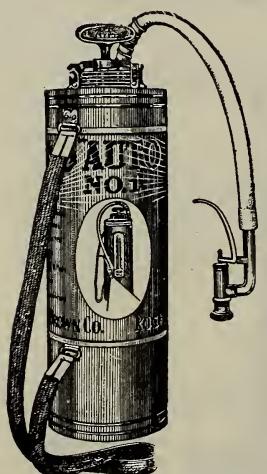
No. 689. "Perfect Success." All parts coming in contact with the liquid are brass with indestructible bronze valves. Malleable iron combination foot rest. Has large air chamber and is double acting, throwing a continuous stream. Is provided with Bordeaux Nozzle and four feet of discharge hose. Complete, each \$7.45.



No. 651. Gardener's Choice. 24-gallon wood tank and 12½ ft. hose. Complete, each, \$35.60.

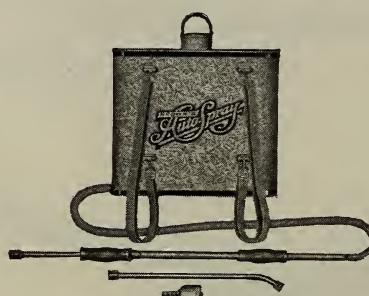


Fig. 832. "Outfit A." Here we have a very useful spraying outfit for almost any purpose. Complete, \$15.35.



Brown's No. 1-D Galvanized Compressed Air Sprayer

Each, \$8.00



Brown's Auto Spray No. 5

The Auto Spray No. 5 is a double action continuous stream pump, making it an ideal, all purpose, land sprayer.

**Auto Spray No. 5 Pump**, only, our net price, each, \$5.50.

**Extensions**, our net price, each, 70 cts.

**Galvanized Knapsack**, our net price, each, \$4.00.



Rochester Compressed Air Sprayer

Brass, \$11.00 each  
Galvanized, \$9.00 each

These are equipped with the famous Kant Klog Nozzle.

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

## SPRAY PUMPS



"Kato"  
Compressed Air  
Sprayer

Capacity, 4 gallons.

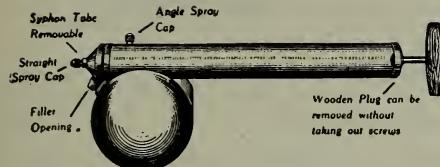
Brass, \$7.50 each.  
Galv. \$5.50 each.



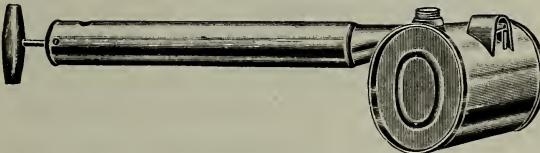
"Planet" Compressed  
Air Sprayer

Capacity, 4 gallons.

Brass, \$8.50 each  
Galvanized, \$6.00 each



Brown's Auto Spray No. 25



1-Qt. Peerless

The Auto Spray No. 25 is a continuous sprayer or atomizer. Handles all solutions, insecticides and disinfectants; capacity, 1 qt.

No. 25B, Galvanized, 2 nozzles, net price, each, \$1.25.

No. 25C, Brass, 2 nozzles, net price, each, \$1.50.

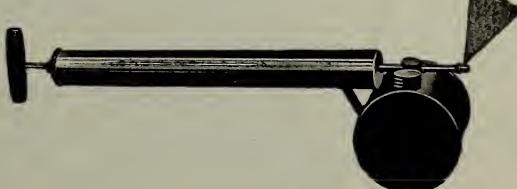
1 qt., All Brass; Continuous, \$2.00 each.

1 qt., Brass Tank, No. 14, Continuous, \$1.50 each.

1 qt., Galvanized Tank, No. 14, Continuous, \$1.25 each.

1 qt., Tin Tank, No. 14, Continuous, \$1.00 each.

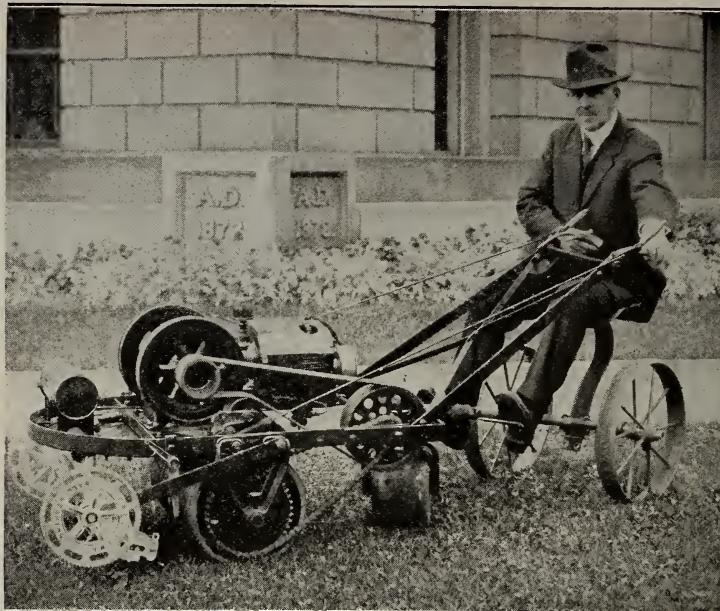
1 qt., Tin Tank, Peerless, 65 cts. each.



Sprayer No. 14

1 pt., Tin Tank, Peerless, 45 cts. each.

1 qt., Galvanized Powder Blower, 85 cts. each.



R. E. Olds Operating a 1920 Ideal Tractor Mower

A sturdy, compact, fool-proof mower which runs on gasoline power and requires only the guidance and attention of an ordinary workman.

Whether used on small lots, on extensive country estates, or public grounds, the "Ideal" can always be relied upon for a clean, speedy job. In mowing unusually large grounds, a great saving of time results from the use of the riding trailer attachment shown above. This practical device may be attached in less than twenty seconds.

Use an "Ideal" if you take pride and pleasure in beautiful grounds.

#### Mechanism So Simple Anyone Can Operate It

Simplicity is the dominating feature of the Ideal. The machine has few parts and no intricate mechanism. An experienced operator is not required—anyone who can keep a gasoline motor supplied with gasoline and oil can operate an Ideal Power Mower. Owing to its simplicity and few parts it seldom gets out of order.

#### The Cutter is Not Driven Direct by Engine

Experience has shown that the type of mower where the cutting reel is driven direct from the engine by means of sprockets and chain, and the mower built rigidly into the frame of the tractor is not practical for the reason that obstacles on the lawn are picked up by the reel, which being positively driven, causes constant breakage.

The principle of the Ideal Lawn Mower is the same as that of the ordinary hand mower. The cutting reel is driven by the traction of the mower wheel. The mower is freely suspended from the frame of the tractor by two side arms. These side arms allow sufficient play to permit of a free tilting motion of the cutter, and the wheels adapt themselves to any irregularity of the ground surface. The mower, therefore, glides over the lawn and any obstruction which may be encountered merely prevents the blades from rotating, and the wheels slip over the ground with no possible chance for breakage. This means added life to the entire outfit.

The driving roller is made up of three separate castings. The center roller is keyed to the shaft. The two outer rollers run loose on the shaft and are driven by the center roller which allows them to have a complete turn before engaging with the center drive roller. This feature facilitates turning, as in turning the outside roller is always free to run ahead of the driver.

#### Our Guarantee

The material and workmanship are guaranteed first-class in every respect and any part proving defective within one year from date of shipment will be replaced free of charge if returned charges prepaid for inspection, but under no circumstances will we allow for cost of labor and other expenses in making replacement.

#### SPECIFICATIONS

Width cut .....	30 in.	Shipping weight .....	.800 lbs.
Speed per hour .....	2½ miles	Width roller .....	24 in.
Diameter roller .....	14 in.	Will cut, allowing 2 in.	
Diameter cutting reel .....	6 in.	lap .....	¾ acre per hour
Face mower wheels .....	1¾ in.	Diameter mower wheels .....	11 in.
Actual weight .....	610 lbs.	Number of cutting blades .....	5

Prices quoted on application. Salesmen sent on request.

**ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE**

## EASY LAWN MOWER SELF ADJUSTING BALL BEARINGS

### List Prices

10 in.	\$13.00	12 in.	\$15.00	14 in.	\$17.00
16 in.	\$19.00	18 in.	\$21.00	20 in.	\$23.00

The only Mower made that will cut Borders, Mounds, Terraces, close to Walls and Fences and all kinds of uneven surfaces with the same ease and efficiency as the smoothest lawn.

### ADVANTAGES

Front Cut. Steel Open Roller. Noiseless in operation. Detachable Handle. Lipped edge Stationary Knife. Drawcut Wiper Blades. Self Sharpening. Self Adjusting Ball Bearings. The Mower always runs on cut portion of the lawn. Six sizes for hand use.



No. 3—\$12.50  
No. 5—\$14.50

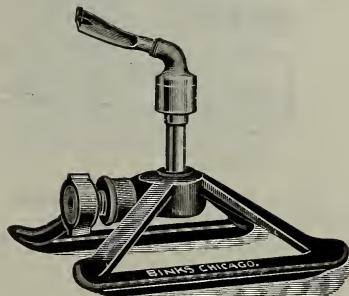
## DUNHAM WATER WEIGHT ROLLER

The welded steel drum can be filled with water to give any desired weight. The same roller can thus be made light enough for soft lawns or heavy enough for firm turf, drive or tennis court.

When empty the roller is easily handled and stored away.

The axle of Dunham Rollers turns in hardened steel roller bearings, making it run so easily that a child can do the rolling.

Your lawn needs rolling now.



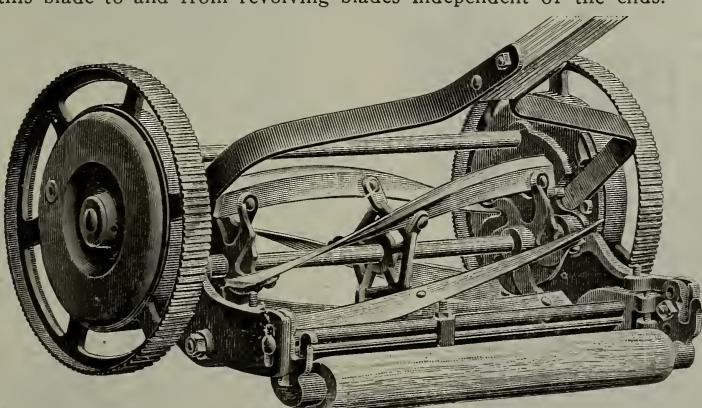
Lawn Sprinkler  
Each, \$1.35

## RICHMOND BALL-BEARING MOWER

### CRUCIBLE STEEL BLADES

Stationary Blade adjusted at both ends and with our patent adjustment for center of Stationary Blade, adjusting this blade to and from revolving blades independent of the ends.

### FIVE-BLADED REVOLVING CUTTER



### Prices on Request

Driving Wheels, 10-in. diameter  
Revolving Cutter, 6-in. diameter.  
Finished in Gold and Silver.  
Best Quality Steel Balls.  
Cones and Cups made of SOLID CONE STEEL

14-inch, 16-inch, 18-inch, 20-inch Cut

Stationary Knife-bar pivoted on steel cones.  
Silent in Operation.  
Adjustable Throughout.  
No Pressed Cups used.  
Ground Perfect.

## BOTZUM'S LIST OF SUNDRIES

FOR THE FLORIST, FARMER, GARDENER AND LAWN. NOT PREVIOUSLY  
CLASSIFIED



The  
Rittenhouse  
Seeder  
No. 3

Price, \$2.00 Each



Dibbles  
Wooden Handle  
Small size, each  
50 cts.

All Iron  
Each 50 cts.



Each 25c

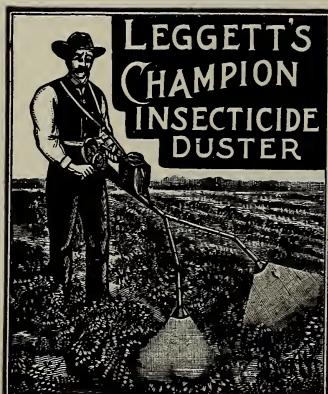
Asparagus Knife, Chisel Shaped.

Asparagus Knife, Flat Shaped.

Asparagus Knife. Fig 399. A "fishtail" style, 10-inch blade, drop forged, well ground, enamelled shank, securely fastened to wood handle. Although especially designed for cutting asparagus, it can be used effectively for cutting out weeds on the lawn, or for any weeding or stirring of the ground. Each, 50 cts.

#### Little Giant Duster

Distributes any dry powder, Paris Green, etc., to perfection. Each, \$12.00.



Champion Insecticide Duster

Distributes Paris Green, London Purple, Hellebore, Sulphur or Lime. Greens two rows of potatoes at a time. Each, \$15.00.

#### MASTICA—Elastic, Adhesive, Easy to Apply

##### The Advantages of Mastica Over Putty.

Mastica is elastic and tenacious. In a few hours after use, a skin or film is formed, preventing the evaporation of the oils and leaving it pliable for years. On account of this quality it admits of the expansion and contraction which is continual in the wood work of a greenhouse from moisture and heat. Putty, on the contrary, becomes hard and brittle, and cracks off under the same circumstances. Broken glass is more easily removed and replaced by new, without the breaking of other glass, which often occurs with hard putty. One gallon will cover about 290 running feet (one side). Price, 1 gallon, \$3.00.



Mastica Machine



Mastica Glazing Machine. For applying Mastica. Price, \$2.75 each.

## SUNDRIES—Continued



**Twemlowe's Old English Glazing Putty.** This putty makes a solid bed, impervious to moisture, and will stop any leak or fault. When set on dry, clean wood, will not heave; can be used in machine or bulb. Preferred by some to Mastica. Per gal. can, weight 16 lbs., \$2.75.

**Permanite.** The black liquid Putty, in 1 gal. cans. Each, \$2.00.

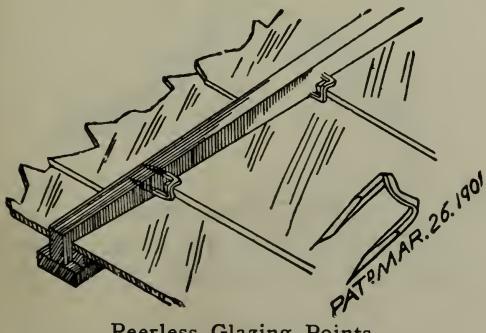
**Farmer's Friend**

A very handly lantern around the barn and has a sick bracket for attaching to wagon with Red Bull's Eye in back to conform with city ordinance. Price, \$1.50 each.



**Putty Bulb.** For glazing greenhouses and hot bed sash. Each, \$1.25.

**Peerless Glazing Points.** The best glazing points on the market. No rights or lefts. No. 1 for hot bed sash. No. 2 for large, single thick glass. No. 2½ for double thick glass on greenhouses and skylights. Per box of 1,000, 75 cts.

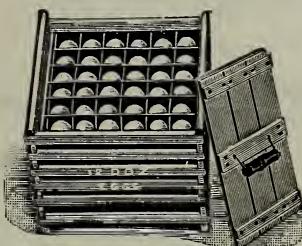


Peerless Glazing Points

**Hose Menders**

**The Cooper.** It is simple, practical and effective. It does not reduce the diameter of the hose. It will not rust or wear out. It can be used as many times as desired. You need no wires, pliers, or mechanical skill to adjust them. They make your hose as good as new. Last of all, when once used you will never be without them. Price for  $\frac{1}{2}$  or  $\frac{3}{4}$ -in. hose, each, 10 cts.; 3 for 25 cts.

**Humpty Dumpty Egg Carriers.** Just the thing to carry eggs to market. Three sizes. 3 doz. size, 25 cts. each; 6 doz. size, 35 cts. each; 12 doz. size, 50 cts. each.



Humpty Dumpty Egg Crate

**Trowels**

No. 2120. Steel, all around good trowel, 40 cts.

No. 212. Steel, smaller than No. 2120. 35 cts.

**Jute Twine.** For bunching, tying grape vines, etc., 2, 3 and 4-ply, in balls. Market price.

**Corn Planter**

American Standard, the best hand corn planter made; has rotary dropping disc. Each, \$2.75.

**Green-house Sprinkler**

**Aluminum.** With coarse and fine brass spray plate, each, \$1.00.

**SUNDRIES—Continued**

We handle the famous "Village Blacksmith" Hand Made Tools



**No. V-14 Pruning Shear**

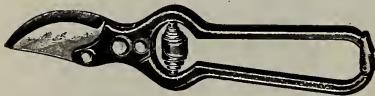
Full Polished Forged Tool Steel, Brass Spring,  
Ratchet Nut. Each, \$1.75.



**Hedge Shears**

Solid Crucible Steel, Forged Blade, Hammer Finish,  
Notched with offset shank, Hardwood Handles.

No. 800—8-inch. Each, \$2.25.  
No. 1000—10-inch. Each, \$3.00.



**No. V-12 Pruning Shear**

Forged Tool-Steel Blade, 9 inches. Each \$1.00.



**No. V-6 Grass Shear**

6-inch Blade, Cutlery Steel. Full Polish Blade,  
Hollow Ground, Enamelled Handle and Bow.  
Each, 85 cts.



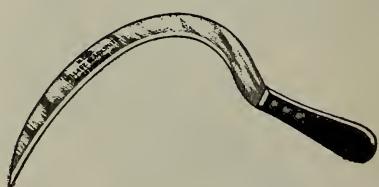
**No. 33 Grass Hook**

Forged Cutlery Steel, Full Polish, Maple Handle.  
Each, 85 cts.



**No. V-2 Grass Shear**

6-inch Forged Blade, Good Quality Enamelled  
Handle. Each, 65 cts.



**No. 2 Grass Hook**

Forged Crucible Steel, Thoroughly Tempered  
Hammer Finish, Full Polish. Each, 65 cts.

## SUNDRIES—Continued

## "Norcross" Cultivator

## HOES AND WEEDERS



Will cultivate closer to plants without injuring them than any other implement known, leaving the soil level, loose and untrampled.

The sharp tapering shovels enter the ground easily and are so arranged one with another, as to literally tear up every inch of the soil from 1 to 6 inches deep. Detachable Steel Prongs, Malleable Head, Extra High Grade Handles and finely finished throughout. Three sizes, suited to both men and women and the average cost only that of a common Hoe.

## Three Sizes and Prices

5-prong, 4 ft. handle, Wt. 3 lbs.....	\$2.00
3-prong, 4-ft. handle, Wt. 2 lbs.....	1.25
Midget, 9-in. handle, Wt. 12 oz. ....	.65



## Weeders

## MAGIC WEEDEER HOE

**Richard's Combination.** The king of garden tools.

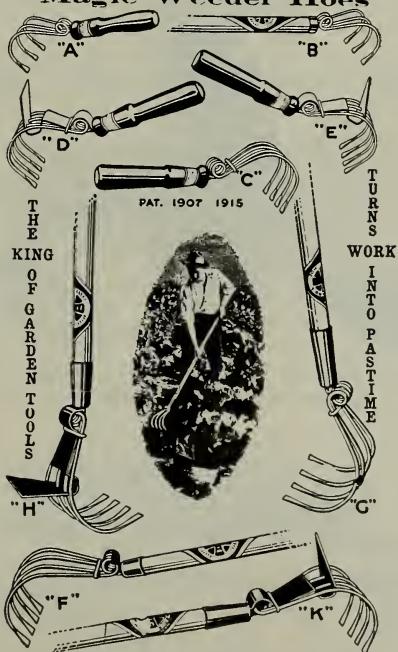
The best hand tool on earth. Turns work into pastime. Does the work with half the labor, saving both time and strength.

## Magic Weeder Hoes

Style	Length Handle	Length over all	Diameter of Tines	Width	Blade	Retails at (each)
A	5 1/4"	9 1/4"	5-32"	2"	NONE	\$0.15
B	16"	20"	5-32"	2"	NONE	.20
C	5 1/4"	10"	5-32"	3"	NONE	.25
D	6"	11 1/4"	5-32"	3"	SQUARE	.40
E	6"	11 1/4"	5-32"	3"	POINTED	.40
F	42"	50"	6-32"	4"	NONE	.50
G	48"	57"	8-32"	5"	NONE	.75
H	48"	56"	7-32"	4"	SQUARE	1.00
K	48"	56"	7-32"	4"	POINTED	1.00

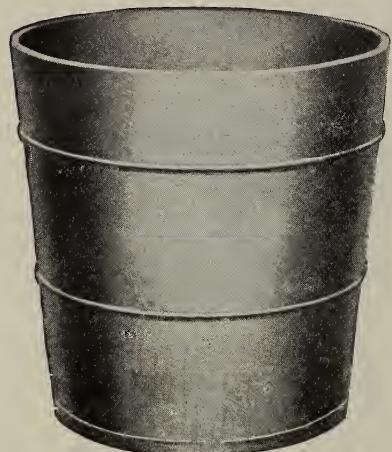
**Raffi.** The best trying material for plants. It is also used for the making of fancy baskets and other articles. It is as soft as silk and will keep indefinitely. Market price.

## REICHARD'S COMBINATION SPRING-TOTH MAGIC WEEDEER HOES



## Galvanized Sprinkling Cans

No. 514—4 qt. Each.....	\$0.75
No. 516—6 qt. Each.....	.85
No. 520—10 qt. Each.....	1.15



### "ANCHOR BRAND" CEDAR PLANT TUBS

#### Richmond Style

The Richmond style tree tubs are made of seasoned, selected Virginia White Cedar, are bound with electric welded wire hoops (galvanized), three hoops to each, except the smallest two pails which have two. The Richmond style fills a long-felt want for a cheap type of plant tub and is being used by many large florists in place of earthen pots. These plant tubs are nicely painted with the best oil paints—a handsome green color inside and out. The tops of the staves are slightly beveled, which gives them a neat, trim finish.

#### PRICE LIST

Size	Inside Top Dia. Inches	Inside Bot. Dia. Inches	Inside Depth Inches	Thickness of Stave Inches	Price each
No. 1	6	5	6	$\frac{3}{8}$	\$0.60
No. 3	8	6	8	$\frac{3}{8}$	.70
No. 5	10	7 $\frac{1}{2}$	9	$\frac{1}{8}$	.85
No. 7	12	9	11	$\frac{1}{2}$	1.25
No. 10	15	11 $\frac{1}{2}$	14	$\frac{5}{8}$	2.25
No. 12	17	13 $\frac{1}{2}$	16	$\frac{5}{8}$	2.50
No. 14	19	15 $\frac{1}{2}$	18	$\frac{5}{8}$	3.75



Mehler's Handy Grass Edger

Each, \$1.00

Mehler's Handy Cultivator

Each, 85 cts.

TRADE  
**Stew-  
feld**  
MARK

**GARDEN TOOL**  
*FIVE Good Tools at the Price of ONE*



### "ANCHOR BRAND" CEDAR PLANT TUBS

#### New York Style

The New York style tree tubs are made of seasoned, selected Virginia White Cedar, and are trimmed with specially designed metal feet, extra heavy flat steel hoops and liberal size metal handles.

These tubs are painted with the best oil paints—a handsome green on the outside and dark grey inside.

Hoops, handles and feet are trimmed in jet black.

#### PRICE LIST

Size	Top Diameter Inches	Bottom Diameter Inches	Depth Finished Inches	Thickness Stave Inches	Price each
No. 3	14 $\frac{1}{2}$	12 $\frac{1}{8}$	14 $\frac{3}{4}$	$\frac{1}{8}$	\$3.50
No. 4	19 $\frac{7}{8}$	17 $\frac{1}{4}$	16 $\frac{5}{8}$	$\frac{1}{8}$	5.00
No. 5	22 $\frac{7}{8}$	20 $\frac{1}{4}$	18 $\frac{1}{2}$	$\frac{1}{8}$	6.50

#### FERN TUBS

Size	Top Diameter Inches	Bottom Diameter Inches	Inside Depth Inches	Thickness Stave and Bottoms Inches	Price each
No. 1	8	6	5	$\frac{7}{16}$	\$0.60
No. 2	10	8	5 $\frac{1}{2}$	$\frac{7}{16}$	.75

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

# EVEREADY DAYLO

REG. U.S.  
PAT. OFF.

The very last word in portable electric lights. Highest quality workmanship throughout; heavily nickel plated fittings; optically correct lenses and parabolic reflector.

Supplied complete with Eveready Tungsten batteries and genuine Mazda bulbs. Contacts designed to give flash or continuous light. Can be used with absolute safety, even in presence of gasoline or other explosive fumes.

### Tubular Daylo



The favorite type for autoists, motor boatists, all who work in the dark. Made in various sizes and finishes.

Mfrs. No.	Size Inches	Price Ea. Complete	No. of Battery	Price Ea. Ex. Batt.	No. of Bulb	Price Ea. Ex. Bulb
2602	Vulcanized Fibre, $1\frac{1}{4} \times 5\frac{1}{2}$	\$1.35	791	\$.30	1182	\$.20
2604	Vulcanized Fibre, $1\frac{1}{2} \times 6\frac{1}{2}$	1.70	790	.35	1198	.20
2612	Vulcanized Fibre, $1\frac{1}{2} \times 8\frac{1}{2}$	2.00	705	.50	1193	.20
2606	Leatherette $1\frac{1}{2} \times 8\frac{1}{2}$	1.50	705	.50	1193	.20

### Miners' Daylo



This type has large lens and reflector and throws an intense light a long distance.

2616	Vulcanized Fibre $1\frac{1}{2} \times 6\frac{1}{2}$	2.00	790	.35	1198	.20
2619	Vulcanized Fibre $1\frac{1}{2} \times 8\frac{1}{2}$	2.25	705	.50	1193	.20

### Searchlight Daylo



The most powerful and penetrating portable light obtainable. Has high efficiency silvered parabolic reflector and accurately ground lens; throws a long penetrating beam of light. Particularly recommended for severe service.

2659	Vulcanized Fibre, $1\frac{1}{2} \times 8\frac{1}{2}$	3.25	705	.50	1193	.20
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### Nickel Plated Tubular Daylo



Beautifully finished and especially adapted for use where the hands are likely to be oily or wet.

Mfrs. No.	Size Inches	Price Ea. Complete	No. of Battery	Price Ea. Ex. Batt.	No. of Bulb	Price Ea. Ex. Bulb
2630	$1\frac{1}{4} \times 5\frac{1}{2}$	\$1.55	791	\$.30	1182	.20
2631	$1\frac{1}{4} \times 6\frac{1}{2}$	1.85	790	.35	1198	.20
2632	$1\frac{1}{2} \times 8\frac{1}{4}$	2.25	705	.50	1193	.20

### Miners' Nickel Plated Tubular Daylo



2633	$1\frac{1}{2} \times 8\frac{1}{2}$	\$2.75	705	\$.50	1193	\$.20
3634	$1\frac{1}{2} \times 6\frac{1}{2}$	2.35	790	.35	1198	.20

### Belt Clip Daylo



Small but very effective, and equipped with a convenient belt clip. Can be clipped to pocket edge shaving mirror, etc.

2629	Gun Metal, 5 $\frac{1}{2}$ in. long	\$1.65	791	\$.30	1182	\$.20
2639	Nickel, 5 $\frac{1}{2}$ in. long	1.65	791	.30	1182	.20
2657	Nickel, 6 $\frac{1}{2}$ in. long	2.00	790	.35	1198	.20

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**Vest Pocket Type Daylo**

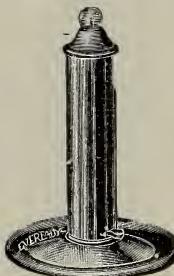
Nickel Plated, Bottom Opening



No. 6961	3 in. x 1 3/4 in.	Price .....	\$1.00
No. 750	Renewal Tungsten Battery	.....	.30
No. 1180	Renewal Mazda Bulb	.....	.20
No. 6962	3 in. x 2 1/4 in.	Price .....	1.25
No. 751	Renewal Tungsten Battery	.....	.40
No. 1181	Renewal Mazda Bulb	.....	.20

**Candle Daylo**

Nickel Plated



This Daylo Candle is lighted by a lever switch, and is particularly convenient about the home. Children can carry it to light the way to their bedrooms without the slightest risk.

No. 1657	5 1/2 in. high.	Price .....	\$1.40
No. 791	Renewal Tungsten Battery	.....	.30
No. 1192	Renewal Mazda Bulb	.....	.20

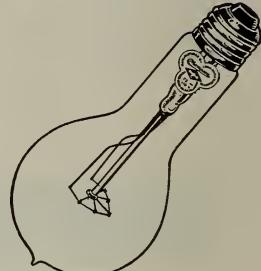
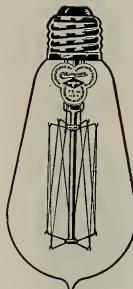
**Vest Pocket Type Daylo**  
Nickel Plated, Side Opening

No. 6991	3 in. x 1 3/4 in.	Price .....	\$1.25
No. 750	Renewal Tungsten Battery	.....	.30
No. 1180	Renewal Mazda Bulb	.....	.20
No. 6992	3 in. x 2 1/4 in.	Price .....	1.50
No. 751	Renewal Tungsten Battery	.....	.40
No. 1180	Renewal Mazda Bulb	.....	.20

**Liberty Daylo**

The most practical Daylo for outdoor service. Can be hung on coat button, or clipped to the belt, enabling owner to use both hands in reading a map, filling a pipe, etc. May be carried in hand, or hung on tent pole by handle.

3651 (Gun Metal Finish)	3 3/4 x 2 1/2.	Price ...	\$2.25
3661 (Nickel Plated)	3 3/4 x 2 1/2.	Price .....	2.25
703	Renewal Tungsten Battery	.....	.40
1190	Renewal Mazda Bulb	.....	.20

**Electric Light Bulbs****Champion**

Type B

MANUFACTURED UNDER GENERAL ELECTRIC COS INCANDESCENT LAMP PATENTS

**Champion**

Type C

MANUFACTURED UNDER GENERAL ELECTRIC COS INCANDESCENT LAMP PATENTS

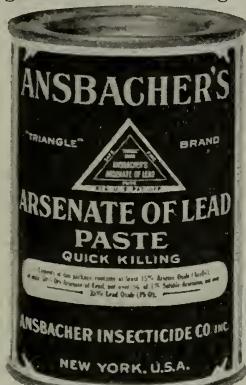
10-Watt	Tungsten-Mazda.....	.35	cts. each
15-Watt	Tungsten-Mazda.....	.35	cts. each
25-Watt	Tungsten-Mazda.....	.35	cts. each
40-Watt	Tungsten-Mazda.....	.35	cts. each
60-Watt	Tungsten-Mazda.....	.40	cts. each
100-Watt	Tungsten-Mazda.....	.85	cts. each
60-Watt	Clear-Nitrogen.....	\$.070	each
75-Watt	Clear-Nitrogen.....	.70	each
100-Watt	Clear-Nitrogen.....	1.10	each
200-Watt	Clear-Nitrogen.....	2.20	each
75-Watt	Daylight-Nitrogen.....	\$.080	each
100-Watt	Daylight-Nitrogen.....	1.25	each
200-Watt	Daylight-Nitrogen.....	2.50	each
50-Watt	Milk white-Nitrogen.....	\$.065	each

## (WHOLESALE)

INSECTICIDES AND FUNGICIDES  
Poisons Cannot Be Sent By Mail

## (RETAIL)

Each year proves the importance of spraying fruit trees and plants in order to destroy the insects and secure a good crop of fruit. The largest and most successful fruit growers are the most enthusiastic on spraying. It will pay you to invest in a spraying apparatus if you have only one fruit tree. The spraying of apple and plum trees is especially recommended. Will furnish table giving formula for making mixtures and directions for application of same on request.

ANSBACHER'S ARSENATE  
OF LEAD

## (Dry and Paste)

"Killing Powder" is what you buy when you purchase Ansbacher's Arsenate of Lead which comes in both Dry and Paste forms. And "Killing Power" is what you get—safe killing power—the combination of quick death to bugs with safety to the foliage that has made the name Ansbacher famous in connection with insecticides for fifty years or more.

Arsenate of Lead is an effective article where it is carefully compounded of proper materials by people who know how. Ansbacher's Arsenate of Lead, (Dry and Paste) is the product of a factory the name of which is well and favorably known to every farmer and grower in the country.

The brand on the package is sales insurance.

Ansbacher goods in the hands of users are unusually satisfactory articles.

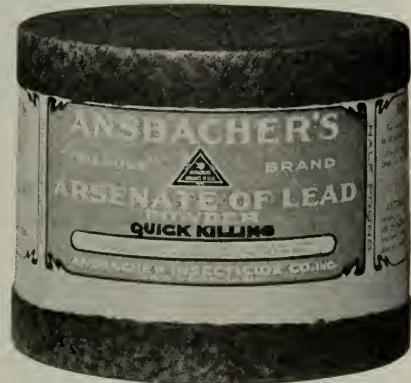
ANSBACHER'S PARIS GREEN  
"The Safe Insecticide"

The one way to be safe in purchasing Paris Green—to know that the Green will kill the bugs—is to look for the name Ansbacher on the package.

Ansbacher's Paris Green is the old reliable Green. Practically all growers in America have heard of it, a high percentage of them have used it with unusually satisfactory results. Satisfied users everywhere make Ansbacher's Brand, the readiest seller on the retailers' shelves.

It costs no more but does more. It is sure death to insect pests and free arsenic has been kept down to a minimum which is insurance against burnt foliage.

Over half a century of experience is back of the Ansbacher Brand and its uniform quality and ideal action make it the most satisfactory article of its kind. This fact plus the great demand for



this brand make it the most profitable Paris Green on the market today—its volume of sales is insured the moment it enters the dealer's store.

Ansbacher's is the grand without a question mark. Quality—reliability—sales—the brand insures them all.

ANSBACHER'S BORDEAUX  
MIXTURE

There are many Bordeaux Mixtures on the market, however, only a few of them are perfect.

Among the exceptional products of this kind comes Ansbacher's Bordeaux Mixture, easily distinguishable by its intense blue color.

Ansbacher's Bordeaux Mixture is a combination of the correct amount of copper with exact proportions of lime necessary to give the proper fungicide and tonic effect.

Practically nothing affects Ansbacher's Bordeaux Mixture. It is compounded to give satisfaction under actual working conditions.

Used alone it is a splendid fungicide. Used in combination with Ansbacher's Paris Green it gives a wonderful spray of quick killing poison, fungicide and tonic all in one.

We are jobbers and manufacturers distributors of Ansbacher's Insecticides.

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

## KEY BRAND INSECTICIDES

## Key-Brand Arsenate of Lead

For Caterpillars and Chewing Insects. For spraying trees and shrubs against leaf chewing insects, fruit flies and codling moth. Mixes easily in water without clogging nozzle, sticks like paint, kills quick and will not burn foliage. 1 lb. makes 12 gallons—ready to apply. 1 lb., 45 cts.; 5 lbs., \$2.00; 10 lbs., \$3.50; 12½ lbs., \$4.15; 25 lbs., \$6.50; 50 lbs., \$11.50; 100 lbs., \$21.00.



## Key-Brand Tree Wound Paint



Prevents Decay. Excellent after Pruning. A residuum, penetrating, antiseptic paint that is not affected by heat, cold or moisture. Does not peel, crack or get brittle. Stops tree bleeding. 1 qt., \$1.25; 1 gal., \$3.00; 5 gal., \$11.25; 50 gal., \$95.00.

Note: Antiseptic paint for wounds and pruning purposes.

## Key-Weed—Liquid Weed Killer

Destroys Weeds in Paths, Roads and Gutters. Kills roots as well as tops of all weed and grass growths. Easier and less expensive than hoeing or digging by hand. Very effective in walks and cobble gutters without injury to road bed. Does not discolor cement. Dilute 1 part Weed Killer to 40 parts water. Usually prevents growth for season. Apply with sprinkling can or cart. 1 qt. 70c; 1 gal. \$1.75; 5 gal. \$7.00; 30 gal., \$33.00; 50 gal., \$47.50.

Note: Forty to one dilution.



## Hillside Brand Paris Green

For use against Potato Bug, Tobacco Worm, etc. Strictly pure Paris Green, high poison content, minimum danger of burning foliage. Can be used wet or dry. ¼ lb., 20 cts.; ½ lb., 35 cts.; 1 lb., 65 cts.; 2 lbs., \$1.20; 5 lbs., \$3.00; 14 lbs., \$7.00; 28 lbs., \$12.60; 56 lbs., \$25.00; 100 lbs., \$43.75; 300 lbs., \$123.60.

Note: Contains 50% Arsenious Oxide and less than 3½% Arsenic Soluble in water.

## Key-Brand Fish Oil Soap

For Destruction of Sucking Insects and Lice. Also used as a spreader for nicotine sprays. Applied by sprayer, water pot or brush. 1 lb. makes 8 to 10 gallons. 1 lb., 35c; 5 lb., \$1.50; 10 lb., \$2.75; 25 lb., \$5.50; 50 lb., \$10.00; 100 lb., \$18.00.

Note: Contact Insecticide for soft bodied insects.



## Target Scale Destroyer (Soluble Oil)

Dormant Spray for San Jose, and Oyster Shell Scale. Most Effective for Leaf Roller. Spray for tree infesting scale and most soft bodied sucking insects. No disagreeable odor, no clogging of nozzle, or burning of the eyes like Lime Sulphur. May be used in spring or fall. Mixes easily, has no sediment, spreads and creeps into crevices of rough bark. Dilute 1 gallon to 20 gallons water—ready to apply. 1 qt., 65 cts.; 1 gal., \$1.65; 5 gal., \$6.50; 30 gal., \$27.00; 50 gal., \$41.00.

Note: Contact Insecticide.



## Key-Brand Bordo Lead (Paste).

## Insecticide and Fungicide—

Two Sprays in One. Best Spray for gardens. Arsenate of Lead combined with a special Bordeaux Mixture by a new process, producing in one spraying operation the killing of insects and preventing of blight, mildew, rust and fungus diseases. Splendid for potatoes and most vegetables, apples, pears

and roses. Sticks like paint and remains on foliage. Best crop insurance. 1 lb. makes about 3½ gallons—ready to apply. 1 lb., 45 cts.; 5 lbs., \$2.00; 10 lbs., \$3.50; 25 lbs., \$6.50; 50 lbs., \$12.00; 100 lbs., \$21.00.

Note: Contains 5% metallic copper and 15% of Dry Arsenate of Lead.

## Key-Brand Bordeaux Mixture (Paste)

For Blight, Mildew, Rust and Fungus Diseases. Also prevents and checks Black Rot and Scab and acts as a deterrent for insects on fruits and vegetables. Dilutes 1 lb. to about 4 gallons of water. 1 lb., 40 cts.; 5 lbs., \$1.75; 10 lbs., \$3.00; 25 lbs., \$6.00; 50 lbs., \$10.50; 100 lbs., \$17.50.

Note: Contains 7% of Metallic Copper.

## Key-Brand Kerosene Miscible Oil

Better than Kerosene Emulsion; mixes easier; has greater killing power and is especially valuable against all soft-bodied insects. Can be used on practically all insects for which nicotine is employed. For woolly aphis on apple and thorn, it is much more effective than Nicotine.. Contains 80% Kerosene. Dilute 1 part oil to 16 parts water. Tender plants 1 part to 36 parts water. 1 pt., 45c; 1 qt., 75c; 1 gal., \$1.75; 5 gal., \$8.00; 50 gal., \$50.00.

Note: Contact Insecticide containing 80% of Kerosene.



**KEY-BRAND INSECTICIDES—Continued****Key-Brand Kerosene Emulsion**

**For Plant Lice and Other Soft Bodied Insects.** Especially woolly aphis—also for Rose Bugs, Cabbage Worms, Scale and Melon Louse. Contains 50% Kerosene. Dilute 1 part to 25 to 50 parts water. 1 qt., 65 cts.; 1 gal., \$1.50; 5 gals., \$6.00; 25 lbs., \$4.50; 50 lbs., \$8.00; 100 lbs., \$14.00.

**Note:** Contact Insecticide containing 56% Kerosene.



**Key-Brand Bordeaux Mixture (Liquid)**

**For Blight, Mildew, Rust and Fungus Diseases.** Also prevents and checks Black Rot and Scab, and acts as a deterrent against insects on fruits and vegetables. 1 gallon makes about 25 gallons. 1 qt., 75c; 1 gal., \$2.00; 5 gal., \$8.50.

**Note:** Contains 4% metallic copper.

**Key-Brand Dry Lime Sulfur**

**For Dormant Spraying of Fruit and Shade Trees, and Bushes against San Jose and Oyster shell scale; also for Peach leaf curl and brown rot of peaches.** Has all the effectiveness of liquid Lime Sulphur, and is much easier to handle—1 lb. makes from 3½ to 5 gallons. 1 lb. 40c; 5 lb., \$1.50; 10 lb., \$2.50; 25 lb., \$4.75; 100 lb., \$15.00; 200 lb., \$27.00.

**Note:** Used for same purposes as liquid Lime Sulphur for both dormant and Summer spraying.

**Key-Brand Calcium Arsenate Powder**

**Safer and better to use than Paris Green.** Has higher poison contents than Arsenate of Lead. Use for spraying potatoes, cotton, tobacco and shade trees against chewing and leaf eating insects. Kills quick, does not burn foliage, and sticks to leaves. Mixes easily with water, and can be used either wet or dry. Can be combined with

Lime Sulfur or Bordeaux Mixture. 1 lb. makes about 40 to 50 gals. Half lb., 35c; 1 lb., 60c; 5 lb., \$2.75; 10 lb., \$4.50; 25 lb., \$9.25; 50 lb. \$17.00; 100 lb., \$32.00; 200 lb., \$61.00.

**Note:** Contains over 42% of Arsenic Oxide and less than 1% of Arsenic soluble in water.

**Key-Brand Cut Worm Killer**

**For use as Poison Bait against cut worms and slugs.** Placed around plants subject to attack. 1 lb., 35c; 5 lb., \$1.50; 25 lb., \$5.00; 100 lb., \$15.00.

**Key-Dry Superfine Powdered Arsenate of Lead**

**Better than Paris Green. Does Not Burn Foliage.** Can be used for wet spraying and dry dusting. Has all the advantages of Arsenate of Lead Paste, but has double the strength, goes twice as far, and is easier to handle and measure out. One lb. makes from 15 to 25 gallons of solution, ready to apply. Half lb., 40c; 1 lb., 75c; 5 lb., \$3.25; 10 lb., \$5.50; 25 lb., \$12.00; 50 lb., \$22.00; 100 lb., \$39.50; 200 lb., \$74.00.

**Note:** Contains over 30% Arsenic Oxide.

**Key-Brand Powdered Hellebore**

**Use when Fruit is Ripe and Almost Ready to Eat.** Made from roots of hellebore, this powder is poisonous to insects but not to human beings. Apply as a powder, just as it comes from package. Half lb., 40c; 1 lb., 75c; 5 lb., \$3.25.

**Note:** Made from White Hellebore Roots.

**Key-Brand Grafting Wax**

**For Pruning and Grafting.** Excellent when trimming trees and shrubbery. Comes in sticks, easily handled. ¼ lb., 15c; ½ lb., 25c; 1 lb. 50c.

**Note:** Convenient for grafting purposes.

**KEY DUSTER GUN**

When the World War affected the food supply of this Country there was a great impetus given to the Home and Small Garden and it was very promptly noted that no adequate means in a convenient form was available for the easy handling of Insecticides and Fungicides. So, after 2 1/2 years of consistent work the **KEY DUSTER GUN** and Insecticide and Fungicide **CARTRIDGES** were born, which adequately supplies in a convenient form

**The New Quick and Easy Way of Using Insecticides and Fungicides in the Cartridge**

Killing many bugs: preventing certain Blights

**No Handling or Mixing of Chemicals and Without the use of Water.**

The Gun automatically opens the Cartridge and applies the materials to the foliage.

**Filling the long felt want for HOME GARDEN, SMALL ORCHARD.**

Simple and Complete Spraying Calendar packed with each Gun. Price of Gun complete \$3.00

Price of Cartridge B. A. for Vegetable and Small Fruit

15 cents each

L. A. S. for Fruit-Hellebor (for Fruit and Vegetable when nearly ripe)

20 cents each

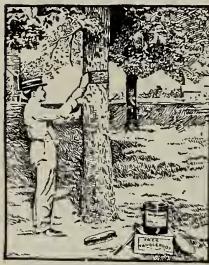
## INSECTICIDES AND PUNGICIDES.

Continued

Scalecide  
(With Fungicide)

A reliable, simple and economical spray for San Jose Scale, Brown Scale, Red Scale, Cottontail Maple Scale, Pear Psylla, Rust Mite, White Fly, and many other scale and soft bodied sucking insects.

Scalecide is not an emulsion, but a soluble miscible oil that mixes instantly with cold water and stays mixed. We believe it to be more effective than any other soap or oil emulsion, and if used as directed will not injure the trees. Spray thoroughly or not at all, using finest nozzle. Fogging is better than drenching. Full directions for use accompany each package. Prices: Qt. cans, 65 cts each; 1 gal. cans, \$1.60 each; 5 gal. cans, \$6.80 each; 30 gal. bbls., \$28.85 each; 50 gal. cans, \$43.00 each. All F. O. B. Cleveland. Prices subject to market changes.



**Tree Tanglefoot.** Perfect safeguard for trees against Gypsy, Browntail and Tussock moths, canker worm, cut worm, ants and other creeping insects. 1 lb. can, 65 cts.; 3 lb. can, \$1.75.

**Free Nicotine** (Grasselli Brand). Use same as Nicoticide.  $\frac{1}{4}$  lb., 50c.;  $\frac{1}{2}$  lb., 80c.; 1 lb., \$2.00; 2 lbs., \$3.80; 8 lbs., \$14.50.

**Nico-Fume Liquid.** For fumigating or spraying; contains 40 per cent nicotine.  $\frac{1}{4}$  lb., 65c.; 1 lb., \$2.00; 4 lbs., \$7.50; 8 lbs., \$14.50.

**Nico Fume Tobacco Paper.** Nicotine soaked into paper which when lighted gives off the fumes that are fatal to aphid or green fly, mealy bug, red spider, etc. An effective remedy easily applied against insects found in the greenhouse. A house 20x100 requires from four to eight

**Slug Shot, Hammond's.** Destroys potato bugs and those on tomato and egg plants, currant worms, cabbage lice and worms. Price, 1 lb. carton, 20 cts.; 5 lbs., 65 cts.; 10 lbs., \$1.15; 25 lbs., \$2.50; barrel in bulk, 250 lbs. at 9 cts. lb.



*The spray  
to use*

### "Our Yield Larger than any Other in this Vicinity."

Mr. Thomas Earle, Steelton, Pa., says: "This season we used Bowker's Pyrox on about half an acre of potatoes. We had an exceedingly dry season, but we had a larger yield per acre than any other in the vicinity—due largely, we believe, to the use of Pyrox—as the plants kept green and healthy longer than those that were not sprayed."

This voices the experience of potato growers everywhere. Pyrox kills the bugs; prevents blight and, as it sticks like paint on the leaves, one application does the work of several applications of Paris Green.

Follow the lead of the big potato growers and orchardists—there is no sentiment about their enthusiastic use of Pyrox—it gets them the money.

We sell Pyrox—any quantity you want, in small crocks, kegs or barrels. Ask for the new and interesting Pyrox booklet.

Once tried, always used. Lb., 40 cts.; 5 lbs., \$1.75; 10 lbs., \$3.00; 25 lbs., \$6.25; 50 lbs., \$11.00; 100 lbs., \$20.00.
---

# "BLACK LEAF 40"

Nicotine Sulphate—40% Nicotine

This is the insecticide that is so highly recommended by Experiment Stations. It destroys Aphid (plant lice), Thrips, Leaf-hoppers on all tree, bush and vine fruits, vegetables, field crops, flowers and shrubs; also Apple Red Bug, Pear Psylla and similar soft-bodied sucking insects—all without injury to foliage.

May be combined with other sprays. Highly concentrated. Soluble in water—easy to mix—does not clog nozzles.

You can not go wrong by ordering "Black Leaf 40" for sucking insects.

#### PRICES:

1 oz.—\$0.25-makes 6 gallons spray
$\frac{1}{2}$ lb.—1.00 " 40 to 120 gals. spray
2 lb.—3.25 " 160 to 500 gals. spray
10 lb.—13.75 " 800 to 2500 gals. spray

sheets as directed on the can. 24 sheets, \$1.25; 144 sheets, \$5.00.

**Tobacco Dust.** Fertilizer and insecticide. An excellent fertilizer for lawns and gardens, and a good preventive against cut worms and leaf-eating caterpillars. Dust onto the plants when they are wet, and for cut worms spread on the ground around the plants to be protected. If you have been troubled with wormy radishes or sickly lettuce, use a tablespoonful to the foot in the bottom of the furrow and sow the seeds right in the Tobacco Dust. It is a sure cure and will give you perfect radishes. Per lb., 15c; 5 lbs., 45c; \$4.00 per 100 lbs.

**Lime and Sulphur Wash.** Lime and Sulphur Wash is conceded to be the best remedy all things considered, that there is against San Jose scale, Scurvy Bark Louse, Oyster Shell Scale, etc., while the lime has some value against some fungus diseases also. For a winter spray use one gallon of Wash to eleven of water and in summer one to sixteen. Per quart, 50c; gallon, \$1.25; 5 gallons, \$5.00; barrel of 45 to 50 gallon, 35c per gallon, f. o. b. Cleveland.



## INSECT PESTS ARE MULTIPLYING

Protect  
Your  
Fruit

Vegetables  
and  
Potatoes



### BUG DEATH—CONTAINS NO PARIS GREEN OR ARSENIC

insuring PROTECTION for your Potatoes, Tomatoes, Squashes, Cucumbers, Cabbages, Melons without danger of Arsenical injury to Plants, Bees, Birds or Humans. Strong healthy Plants in turn insure LARGEST YIELD—HIGHEST QUALITY BIGGEST PROFIT. May be used Dry, as it comes in the package, or with Water or Bordeaux Mixture; we recommend Dry Dusting; no drawing water; no mixing solutions. Full Directions are on Each Package. BUG DEATH adheres closely to the vines, and does not readily wash off. Since this Insecticide was first placed upon the market, twenty-one years ago, it has given the best of satisfaction, receiving the fullest endorsement of those using it.

### PRICES

(BUG DEATH IS NEVER SOLD IN BULK)

Per 1 lb. package .....	\$ .20	Per 5 lb. package .....	\$ .75
Per 3 lb. package .....	.50	Per 12½ lb. package .....	1.50
Per 100 lb. keg.....	\$10.00		

**Bug Death Aphis:** A new companion preparation to regular BUG DEATH, especially for Sucking Insects, Lice and Aphis, and particularly for use on Fruit Trees, Berry Bushes, Grape Vines, HOUSE PLANTS. Likewise a fine tenacious powder, applied dry or in water. Ready for use in dust form just as it comes in the package. No Paris Green or Arsenic. Used by Practical Growers the past two seasons with complete success.

### PRICES

Per 12 oz. package .....	\$ .20
Per 80 lb. keg .....	10.00

BUG DEATH AND BUG DEATH APHIS MAY BE SENT PARCEL POST

TWO INEXPENSIVE DUSTERS FOR APPLYING BUG DEATH AND OTHER POWDERS  
QUICK COVERING FOR ALL PLANTS AND PINES



**Dickey Duster**—Handy and Practical for Garden Use. Price, 45 cts.

**B-D Sifter**—New Efficient and Economical for General Farm Use. Quantity regulated as required. Price, 85 cts.



We Are Jobbers and Manufacturers' Distributors of Bug Death and Bug Death Aphis

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

**HIGH GRADE FERTILIZER**

For the Lawn and Garden



If you want a good crop or nice lawn, use the best forms of plant food. These fertilizers furnish the plant food required, in the right proportion, at the right time. The cost is little, compared with the results obtained by using them.

**Lawn Lime**

Used on the farm or garden for sweetening or purifying the soil; should be used early in Spring or late in Fall. 50 lb. bags, 75 cts.; ton, \$25.00.

**LIST OF FERTILIZERS CARRIED IN STOCK**

BRAND	Size of Pkg.	Nitro- gen	Equal to Am'nia Acid	Avail. Phos.	Total Phos. Acid	Actual Potash	Called for Price		Delivered Price	
							Ton	Bag	Ton	Bag
Swift's Sheep Manure	100 lb.	....	2	....	1	1½	\$40.00	\$2.25	\$45.00	\$2.75
Swift's Pure Bone Meal	125 lb.	....	2½	....	29	....	58.00	4.00	63.00	4.50
Swift's 16% Acid Phos.	125 lb.	....	....	16	....	....	40.00	2.80	45.00	3.50
Swift's Superphosphates	125 lb.	....	2	8	....	2	60.00	4.25	65.00	5.00
Swift's Clay Soil Fertilizer	125 lb.	....	2	12	....	....	55.00	3.75	60.00	4.50
Vine and Plant Food	100 lb.	....	....	....	....	....	....	4.50	....	5.00
Proto Bone Flour	100 lb.	....	....	....	....	....	....	5.00	....	5.50

**LIST OF FERTILIZERS DELIVERED FROM WAREHOUSE ON SHORT NOTICE—IN TON LOTS ONLY**

Swift's Diamond A Fertilizer	3	8	....	5	\$65.00	.....	\$70.00	.....
Swift's Diamond B Fertilizer	3	8	....	3	60.00	.....	65.00	.....
Swift's Diamond C Fertilizer	2	8	....	5	60.00	.....	65.00	.....
Swift's Champ. Wheat-Corn Grower	2	12	....	2	55.00	.....	60.00	.....
Swift's Ohio Corn Special	2	10	....	2	50.00	.....	55.00	.....
Swift's Truck Grower	1	9	....	4	50.00	.....	55.00	.....
Swift's Diamond K Grain Grower	1	12	....	1	45.00	.....	50.00	.....
Swift's Complete Fertilizer	1	8	....	1	40.00	.....	45.00	.....
Swift's Tankage & Phosphate	1	12	....	0	40.00	.....	45.00	.....
Swift's High Grade Phos. & Potash	....	10	....	4	45.00	.....	50.00	.....
Swift's 1-20 Bone Meal & Potash	1	....	20	..	48.00	.....	53.00	.....

**FERTILIZER IN SMALL PACKAGES**

Swift's Plant Food	5 lb.	10 lb.	25 lb.	50 lb.
Swift's Bone Meal	40c	60c	\$1.40	\$2.50
Swift's Sheep Manure	40c	60c	1.40	2.50
Shur Grow	40c	60c	.90	1.50
	12 oz., 10c	.....	10 lbs., 65c	

**ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE**

Inoculate Your Alfalfa, Clovers, Cow Peas, Soy Beans, Vetches and  
all other legume crops with

# Mulford Cultures

*FOR LEGUMES*

**Small Cost      Large Returns      Easy to Use      No Labor Expense**

Always specify on your order what crop you want to inoculate, as there is a different strain of bacteria for each legume.

ALFALFA  
CRIMSON CLOVER  
SWEET CLOVER  
WHITE CLOVER

RED CLOVER  
ALSIKE CLOVER  
MAMMOTH CLOVER  
COW PEAS

SOY BEANS  
Canada Field Peas  
VETCH  
HORSE BEANS

SWEET PEAS  
GARDEN BEANS  
GARDEN PEAS  
LIMA BEANS

## PRICES

Mulford Cultures are supplied for the varieties of legumes listed at the following prices:

5-Acre Size, \$5.00 ("A Dollar per Acre")	Small Size (Supplied only in 4 varieties, for
1-Acre Size .....	\$1.50      Garden Peas, Garden Beans, Lima Beans
$\frac{1}{4}$ -Acre Size .....	.50      and Sweet peas) ..... .25

## BOTZUM'S STANDARD BACTERIA

### INOCULATION Read Carefully

Alfalfa, all clovers, all beans and peas, and vetch, are legumes. Legumes, if inoculated, will develop on their roots small protuberances, called nodules. These nodules are masses of bacteria—living germs. These germs take nitrogen from the air and supply it to the plant. Nitrogen is the most expensive of all the chemical elements entering into plant growth. The farmers' problem is largely a nitrogen problem. Lime, phosphorous, even potash where needed, can be supplied. But nitrogen, in quantity, is too expensive to supply. Modern farmers therefore grow their nitrogen, grow it with legume crops.

But legumes can not take nitrogen from the air unless there are nodules on the roots, and nodules do not ordinarily develop unless the germs are artificially placed on the roots. Placing these germs is called inoculation.

Inoculation is done with a culture of living germs, bacteria, applied to the seeds before planting.

Botzum Brothers' Standard Inoculating Bacteria is a culture of living germs, grown direct from no-

dules taken from the roots of legume plants. It is grown by a competent bacteriologist, in a modern laboratory, supplied with the best appliances procurable. The germs are shipped in amber bottles to exclude the light, with glass cotton plugged air tubes to supply air to the germs. This bacteria is then mixed with water and the seeds are sprinkled before planting. This places the germs right on the incipient root of the plant, where it belongs, and inoculation is sure and certain.

The cost of Botzum Brothers Inoculating Bacteria is low, very low, but a better bacteria cannot be made at any price. Every one can afford to inoculate—can not afford not to. It will pay for itself many times in the increase in crop grown, and many more times by the improvement of the soil itself—by the nitrogen placed in the soil from the nodules and left there for succeeding crops.

Remember there is a separate germ for every legume—one for each of the clovers, for alfalfa, soy beans, garden beans, peas, vetch, etc., etc.

When ordering state crop to be inoculated.

### BOTZUM BROTHERS INOCULATING BACTERIA

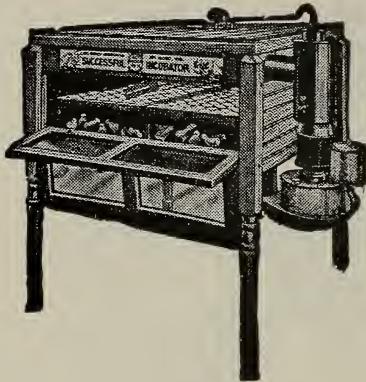
#### PRICE

Garden size .....	\$ .50	2 Acre size .....	1.45
1 Acre size .....	.75	4 Acre size .....	2.25
6 Acre size .....	3.00		

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

# Succeed

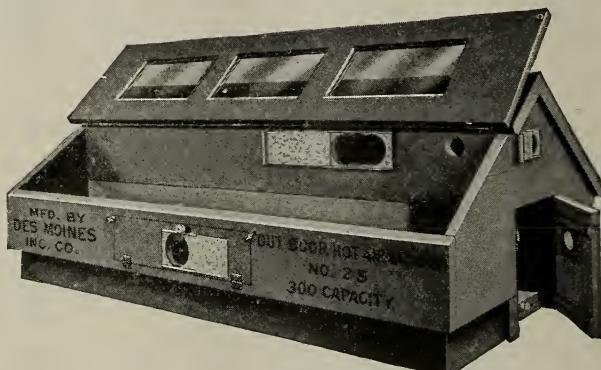
## With the Successful



### INCUBATORS

No. 0 60 egg size .....	\$12.75
No. 6 120 egg size .....	20.00
No. 5 175 egg size .....	24.50
No. 9 240 egg size .....	29.50
No. 4 312 egg size .....	34.00

SUCCESSFUL Brooders are worthy companions of SUCCESSFUL Incubators. They are constructed entirely of California redwood. Steady heat, sufficient air and an abundance of light are the essentials of a perfect working brooder and these features will be found in all SUCCESSFUL Brooders.



### BROODERS

No. 21 100 chick capacity Indoor H. A.....	\$12.00
No. 22 200 chick capacity Indoor H. A.....	14.40
No. 20 200 chick capacity Outdoor H. A.....	16.80
No. 25 300 chick capacity Outdoor H. A.....	20.00
No. 14 200 chick capacity Outdoor H. W.....	19.00

We have a carload of the SUCCESSFUL Incubators and Brooders in stock awaiting your selection. Call at our place of business and we will gladly demonstrate them or on receipt of your name and address, we will mail a large 128-page descriptive catalog direct to you.

**The Botzum Bros. Company**

**772-774 Central Ave.**

**Cleveland, Ohio**

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**ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE**

**LET THE "SUCCESSFUL" SPROUTER HELP TO REALIZE YOUR DREAMS—  
50% TO 80% HIGHER EGG PRODUCTION—30% SAVING IN FEED COST**

### FEED SPROUTED OATS

Make three bushels of fresh, green, tempting feed from one bushel of oats, wheat or rye. Turn loafing hens into money-making egg producers, have eggs to sell when prices are highest, get fertile eggs for winter and early spring hatches—and all at a big saving in feed cost. Every poultry raiser should have a "Successful" Sprouter. Saves its cost in a few days' feeding and then keeps on saving money and doubling up your profit for a life-time service.

## "Successful" Grain Sprouter

**Practically All Steel—Made in Sections**

Double steel walls—metal trays. Cannot be compared to wooden sprouters. Warp proof—shrink proof—swell proof—nothing in it to rot or get out of order. Glass doors.

EXCELLENT FOR USE AS A  
SEED CORN TESTER.

FINE TO START YOUR  
PLANTS THE EASIEST AND  
SUREST WAY.

SPROUTED OATS MAKES  
FOR BETTER FERTILITY IN  
WINTER-LAID EGGS.

PROVIDES QUICK GROWTH  
PROMOTING FEED FOR THE  
EARLY CHICKS.



### PRICES AND CAPACITIES

No. 1—Base and 1 section; 2 trays; holds 8-10 qts. dry grain (for flocks from 30-60 hens) .....	\$10.50
No. 2—Base and 2 sections; 4 trays; holds 16-20 qts. dry grain (for flocks from 75-100 hens).....	13.75
No. 3—Base and 3 sections; 6 trays; holds 24-30 qts. dry grain (for flocks from 130-200 hens)	17.50
No. 4—Base and 4 sections; 8 trays; holds 32-40 qts. dry grain (for flocks from 250-350 hens)	21.00
No. 5—Base and 5 sections; 10 trays; holds 40-50 qts. dry grain (for flocks from 400-600 hens)	24.50
Each additional section and 2 galvanized all-steel trays .....	4.50

Thermometer, Lamp, Poultry Course and Complete Directions are sent free with each Sprouter. Everything is complete for immediate operation.

**ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE**

**Moe's Round Baby Chick Feeders**

PATENTED  
No. 12 FEEDER



PATENTED  
No. 11 FEEDER

Pure food for the baby chicks. A great feed saver, as the little chicks cannot get into it and contaminate the feed. Cannot be upset. Can also be used for water or milk. This is a practical, well-made feeding device that will last for years. Manufactured in two sizes.

No. 11—6 inches in diameter, 8 feeding holes, each ..... \$0.20

No. 12—8½ inches in diameter, 12 feeding holes, each ..... .35

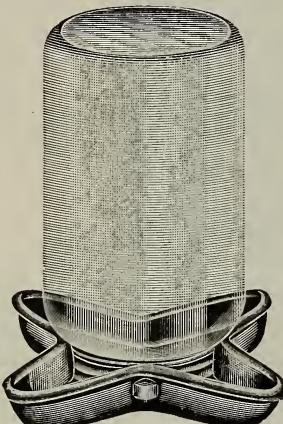
**Moe's Star Jar Fountain and Feeder**

Patented

The most simple, practicable and durable Mason Jar Fount on the market.

Will fit pint, quart or one-half gallon Mason jar. Manufactured of one piece of non-rusting metal. No parts to come unsoldered. Leaking impossible. Convenient, cheap and sanitary. Provides greater drinking surface than the round fountain. Little chicks cannot get drowned. Can be used for feed as well as water. Manufactured in one size only.

No. 32—Without the jar (two).....\$0.25

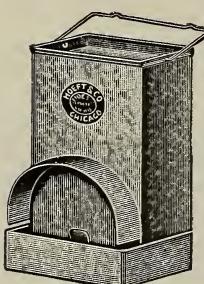
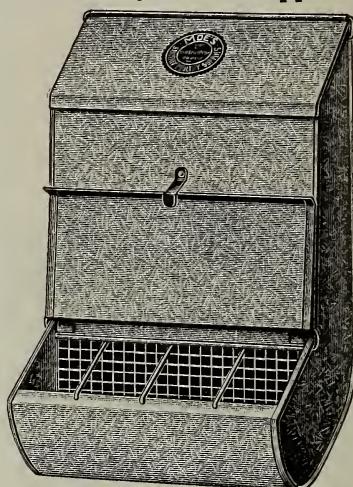


Star Jar Fountain

**Moe's Drop Bottom Wall Fountain**

Manufactured from Galvanized Iron. May be hung up on the wall out of the dirt and litter. Nothing to get out of order. Easy to fill and easy to clean. When filled, two, back to back, may be carried in each hand. May be used for Chicks, Fowls or Pigeons. Three sizes.

No. 40—2-qt., packed 12 in. Price, each ..... \$0.85  
No. 41—1-gal., packed 6 in. Price, each ..... 1.00  
No. 42—2-gal., packed 6 in. Price, each ..... 1.35

**Moe's Dry Mash Hopper**

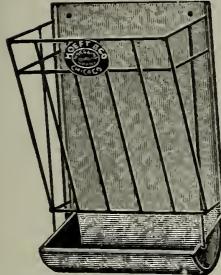
No. 36 HOPPER

PATENTED APRIL 3, 1917

The curved bottom of the Hopper keeps the feed within easy reach of the birds. The gradual enlargement from the top to base prevents clogging. The wire grid and the wires running from the flange through the wire grid prevent any chance of the fowls throwing out or wasting the feed. The sloping cover prevents the birds from roosting on the Hopper, and when both covers are closed, it is rat and mouse proof. A trial will convince you that it is a Hopper of the greatest merit. Manufactured of heavy galvanized iron in three sizes.

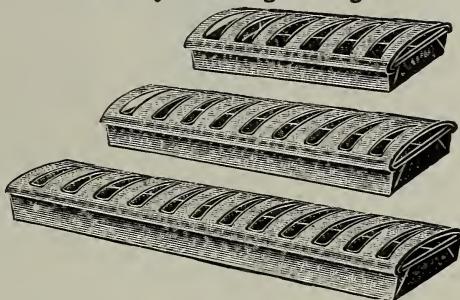
No. 35—8½ in. wide, packed 6 in., weight	\$1.50
24 lbs. Each	
No. 36—12 in. wide, packed 4 in., weight	2.00
19 lbs. Each	
No. 37—24 in. wide, packed 2 in., weight	2.50
22½ lbs. Each	

**ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE**

**Sanitary Feeding Troughs****Moe's Poultry Vegetable Rack**

Manufactured from galvanized iron and wire. For feeding roots, beets, cabbage sprouted oats, etc. A big time and feed saver. Every breeder needs one or more.

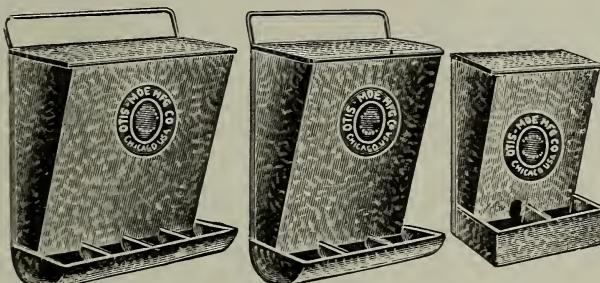
No. 44—Packed 6 in.  
Weight 10 lbs.  
Price, each .....\$0.70



No. 23	No. 21—12 inches long, packed 12 in., shipping weight 12 lbs. Each .....	\$0.60
	No. 22—18 inches long, packed 6 in., shipping weight 10 lbs. Each .....	.85
	No. 23—24 inches long, packed 6 in., shipping weight (?) lbs. Each .....	1.10

**Grit and Shell Boxes**

Grit, shell and charcoal have now become a recognized, essential part of the diet insuring healthy fowls. They cannot be more economically supplied than in one of our inexpensive compartment boxes. Can also be used as a feed hopper for little chicks. Made of heavy galvanized iron in three sizes:



No. 90—FOUR COMPARTMENT, ROUND BOTTOM

No. 9—THREE COMPARTMENT ROUND BOTTOM

No. 45—TWO COMPARTMENT SQUARE BOTTOM

No. 45—For baby chicks, packed 12 in., shipping weight 11½ lbs., each .....	\$0.45
No. 9—For grown birds, packed 6 in., shipping weight 15 lbs., each .....	1.10
No. 90—For grown birds, packed 6 in., shipping weight 20 lbs., each .....	1.40

## NUMBER OF PLANTS TO AN ACRE

Set at regular distances apart	No. plants	Distance apart.	No. plants	Distance apart.	No. plants
3 in. by 4 in.	522,720	4½ ft. by 4½ ft.	2,150	14 ft. by 14 ft.	222
4 in. by 4 in.	392,040	5 ft. by 1 ft.	8,712	15 ft. by 15 ft.	193
6 in. by 6 in.	174,240	5 ft. by 2 ft.	4,356	16 ft. by 16 ft.	170
1 ft. by 1 ft.	43,560	5 ft. by 3 ft.	3,904	16½ ft. by 16½ ft.	160
1½ ft. by 1½ ft.	19,360	5 ft. by 4 ft.	2,178	17 ft. by 17 ft.	150
2 ft. by 1 ft.	21,780	5 ft. by 5 ft.	1,742	18 ft. by 18 ft.	134
2 ft. by 2 ft.	10,890	5½ ft. by 5½ ft.	1,440	19 ft. by 19 ft.	120
2½ ft. by 2½ ft.	6,960	6 ft. by 6 ft.	1,200	20 ft. by 20 ft.	108
3 ft. by 1 ft.	14,520	6½ ft. by 6½ ft.	1,031	25 ft. by 25 ft.	69
3 ft. by 2 ft.	7,260	7 ft. by 7 ft.	888	30 ft. by 30 ft.	48
3 ft. by 3 ft.	4,840	8 ft. by 8 ft.	680	33 ft. by 33 ft.	40
3½ ft. by 3½ ft.	3,555	9 ft. by 9 ft.	537	40 ft. by 40 ft.	27
4 ft. by 1 ft.	10,890	10 ft. by 10 ft.	435	50 ft. by 50 ft.	17
4 ft. by 2 ft.	3,630	11 ft. by 11 ft.	360	60 ft. by 60 ft.	12
4 ft. by 4 ft.	2,722	12 ft. by 12 ft.	302	66 ft. by 66 ft.	10

RULE.—Multiply the distance in feet between the rows by the distance the plants are apart in the rows, and the product will be the number of square feet for each plant or hill; which divided into the number of square feet (43,560), will give the number of plants to the acre.

## ABOUT PARCELS POST

We give below a Parcel Post rate table for the convenience of those wishing goods sent by mail in larger quantities than are quoted "postpaid" herein.

The rate for Seeds, Bulbs, Plants and Books is 1 cent for each two ounces up to 8 ounces regardless of distance. Over 8 ounces the pound zone rate applies.

Local Zone	1st Zone	2nd Zone	3rd Zone	4th Zone	5th Zone	6th Zone	7th Zone	8th Zone
City of Clyd. and its rural routes	Not over 50 miles from Cleveland	51 to 150 miles from Cleveland	151' to 300 miles from Cleveland	301 to 600 miles from Cleveland	601 to 1000 mi. from Cleveland	1001 to 1400 mi. from Cleveland	1401 to 1800 mi. from Cleveland	Over 1800 miles from Cleveland
Postage required	Postage required	Postage required	Postage required	Postage required	Postage required	Postage required	Postage required	Postage required
Over 8 oz. up to 1 lb.	5c	5c	6c	7c	0.08	0.09	0.11	0.12
Over 1 lb. up to 2 lbs.	6c	6c	8c	11c	.14	.17	.21	.24
Over 2 lbs. up to 3 lbs.	6c	7c	10c	15c	.20	.25	.31	.36
Over 3 lbs. up to 4 lbs.	7c	8c	12c	19c	.26	.33	.41	.48
Over 4 lbs. up to 5 lbs.	7c	9c	14c	23c	.32	.41	.51	.60
Over 5 lbs. up to 6 lbs.	8c	10c	16c	27c	.38	.49	.61	.72
Over 6 lbs. up to 7 lbs.	8c	11c	11c	31c	.44	.57	.71	.84
Over 7 lbs. up to 8 lbs.	9c	12c	12c	20c	.50	.65	.81	.96
Over 8 lbs. up to 9 lbs.	9c	13c	13c	22c	.56	.73	.91	1.08
Over 9 lbs. up to 10 lbs.	10c	14c	14c	24c	.62	.81	1.01	1.20
Over 10 lbs. up to 11 lbs.	10c	15c	15c	26c	.68	.89	1.11	1.32
Over 11 lbs. up to 12 lbs.	11c	16c	16c	26c	.68	.89	1.11	1.32
Over 12 lbs. up to 13 lbs.	11c	17c	28c	51c	.74	.97	1.21	1.44
Over 13 lbs. up to 14 lbs.	12c	18c	18c	30c	.55c	.80	1.05	1.31
Over 14 lbs. up to 15 lbs.	12c	19c	19c	32c	.59c	.86	1.13	1.41
Over 15 lbs. up to 16 lbs.	13c	20c	20c	34c	.63c	.92	1.21	1.51
Over 16 lbs. up to 17 lbs.	13c	21c	21c	36c	.67c	.98	1.20	1.61
Over 17 lbs. up to 18 lbs.	14c	22c	22c	36c	.67c	.98	1.20	1.61
Over 18 lbs. up to 19 lbs.	14c	23c	23c	40c	.75c	1.10	1.45	1.81
Over 19 lbs. up to 20 lbs.	15c	24c	24c	42c	.79c	1.16	1.53	1.91
Over 20 lbs. up to 21 lbs.	15c	25c	25c	44c	83c	1.22	1.61	2.01
Over 21 lbs. up to 22 lbs.	16c	26c	26c					
Over 22 lbs. up to 23 lbs.	16c	27c	27c					
Over 23 lbs. up to 24 lbs.	17c	28c	28c					
Over 24 lbs. up to 25 lbs.	17c	29c	29c					
Over 25 lbs. up to 26 lbs.	18c	30c	30c					
Over 26 lbs. up to 27 lbs.	18c	31c	31c					
Over 27 lbs. up to 28 lbs.	19c	32c	32c					
Over 28 lbs. up to 29 lbs.	19c	33c	33c					
Over 29 lbs. up to 30 lbs.	20c	34c	34c					
Over 30 lbs. up to 31 lbs.	20c	35c	35c					
Over 31 lbs. up to 32 lbs.	21c	36c	36c					
Over 32 lbs. up to 33 lbs.	21c	37c	37c					
Over 33 lbs. up to 34 lbs.	22c	38c	38c					
Over 34 lbs. up to 35 lbs.	22c	39c	39c					
Over 35 lbs. up to 36 lbs.	23c	40c	40c					
Over 36 lbs. up to 37 lbs.	23c	41c	41c					
Over 37 lbs. up to 38 lbs.	24c	42c	42c					
Over 38 lbs. up to 39 lbs.	24c	43c	43c					
Over 39 lbs. up to 40 lbs.	25c	44c	44c					
Over 40 lbs. up to 41 lbs.	25c	45c	45c					
Over 41 lbs. up to 42 lbs.	26c	46c	46c					
Over 42 lbs. up to 43 lbs.	26c	47c	47c					
Over 43 lbs. up to 44 lbs.	27c	48c	48c					
Over 44 lbs. up to 45 lbs.	27c	49c	49c					
Over 45 lbs. up to 46 lbs.	28c	50c	50c					
Over 46 lbs. up to 47 lbs.	28c	51c	51c					
Over 47 lbs. up to 48 lbs.	29c	52c	52c					
Over 48 lbs. up to 49 lbs.	29c	53c	53c					
Over 49 lbs. up to 50 lbs.	30c	54c	54c					

## INSURED PARCEL POST

Packages up to \$25.00 in value will be insured for their full value on payment of a fee of 5 cents for each package in addition to the regular post rates. Packages in value over \$25.00 will be insured for their full value, but not to exceed \$50.00 for a fee of 10 cents for each package in addition to the regular Parcel Post rates. If you desire your package insured, send the insurance fee in addition to the amount you send to pay for the goods—and be sure to mention same on your order.

## WEIGHT LIMIT

In the local, first and second zones, packages will be delivered by Parcel Post, weighing up to 70 pounds. In the third to eighth zones, the weight limit is 50 pounds.

## SIZE LIMIT

The size of the parcel in no case is to exceed 72 inches in length and girth combined. In other words, the circumference of the parcel at its thickest part, plus length, must not exceed 72 inches.

## RETURNING GOODS

Should you ever find it necessary to return goods by Parcel Post, never put a letter or any money in the package, as that would make the whole shipment bear a first-class postage charge. Never seal a Parcel Post package or place a stamp over a string. Always put your name and address in the upper left-hand corner.

**USEFUL TABLES**  
**STANDARD WEIGHTS OF SEED AND QUANTITIES TO SOW PER ACRE.**

	Pounds per Acre	Pounds per Bu.
Alfalfa—broadcast	18- 22 Lbs.	60 Lbs.
Alfalfa—drilled	15- 20 "	60 "
Barley	95-110 "	48 "
Beans—in hills	20- 35 "	60 "
Blue Grass, Kentucky	35- 40 "	14 "
Blue Grass, Canada	35- 40 "	14 "
Brome Grass—alone for hay	18- 20 "	14 "
Brome Grass—alone for pasture	20- 25 "	14 "
Broom Corn	36 "	48 "
Broom Corn—for seed	12 "	48 "
Buckwheat	60- 70 "	52 "
Clover, Alsike—alone for forage	8- 15 "	60 "
Clover, Alsike—on wheat or rye in spring	4- 6 "	60 "
Clover, Mammoth	12- 15 "	60 "
Clover, Red—alone for forage	16 "	60 "
Clover, Red—on small grain in spring	8- 14 "	60 "
Clover, Sweet—hulled	20- 30 "	60 "
Clover, Sweet—unhulled	30- 40 "	33 "
Clover, White	10- 12 "	60 "
Corn	10- 12 "	56 "
Corn—for silage	30- 35 "	56 "
Cow Peas—broadcast	80-120 "	60 "
Cow Peas—drilled	45- 60 "	60 "
Crimson Clover	12- 15 "	60 "
Canada Field Peas—broadcast	150-160 "	60 "
Canada Field Peas—with oats	90-100 "	60 "
Flax—for fibre	75-110 "	56 "
Flax—for seed	35- 45 "	56 "
Kafir—drills	3- 5 Bu. 40 Lbs.	14 "
Grass—for lawns	25 "	48 "
Hungarian Millet—for hay	3- 6 "	56 "
Hungarian Millet—for seed	10- 12 "	56 "
Kafir—for fodder	15- 20 "	24 "
Meadow Fescue	40 "	50 "
Millet, Common—for hay	25 "	50 "
Millet, Common—for seed	40 "	50 "
Millet, German—for hay	25 "	50 "
Millet, German—for seed	40 "	50 "
Millet, Siberian—for hay	25 "	50 "
Millet, Siberian—for seed	15 "	35 "
Millet, Japanese	30 "	14 "
Oat Grass, Tall	70-100 "	32 "
Oats	25- 35 "	14 "
Orchard Grass	40- 42 "	50 "
Pasture Mixture	2- 4 "	50 "
Rape—in drills	4- 8 "	50 "
Rape—broadcast	14- 18 "	50 "
Red Top—solid seed	30- 40 "	14 "
Red Top—in chaff	55- 65 "	56 "
Rye—early	75-112 "	56 "
Rye—late	175-200 "	56 "
Rye—forage	40- 50 "	24 "
Rye Grass, Italian	40- 50 "	24 "
Rye Grass, Perennial	35- 45 "	14 "
Sheep's Fescue	75-100 "	50 "
Sorghum, Forage—broadcast	2- 5 "	50 "
Sorghum—for seed or syrup	30- 40 "	60 "
Soy Beans—drills	60- 80 "	60 "
Soy Beans—broadcast	75 "	46 "
Sweet Corn—in drills for fodder	150 "	46 "
Sweet Corn—broadcast	15- 25 "	45 "
Timothy	10 "	
Timothy and Clover	4 "	
Vetch, Hairy—drilled (plus 1 bu. small grain)	60 "	60 "
Vetch, Hairy—broadcast (plus 1 bu. small grain)	80 "	60 "
Vetch, Spring (plus 1 bu. small grain)	80 "	60 "
Wheat	90-120 "	60 "

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

## USEFUL TABLES

## REFERENCE TABLES

Quantity of Seed Requisite to Produce a Given Number of Plants and Sow an Acre.

	Quantity per acre
Artichoke, 1 oz. to 500 plants	6 oz.
Asparagus, 1 oz. to 800 plants	1 lb.
Asparagus Roots	1,000 to 7,250
Barley	$2\frac{1}{2}$ bu.
Beans, Dwarf, 1 pint to 100 ft. of drill	1 "
Beans, pole, 1 pint to 100 hills	$\frac{1}{2}$ "
Beet, garden, 1 oz. to 100 ft. of drill	7 lbs.
Beet, mangel, 1 oz. to 100 ft. of drill	5 "
Broccoli, 1 oz. to 5,000 plants	2 oz.
Brussels Sprouts, 1 oz. to 5,000 plants	2 "
Buckwheat	$\frac{1}{2}$ bu.
Cabbage, 1 oz. to 3,000 plants	2 oz.
Carrot, $\frac{1}{4}$ oz. to 100 feet of drill	$2\frac{1}{2}$ lbs.
Cauliflower, 1 oz. to 3,000 plants	$2\frac{1}{2}$ oz.
Celery, 1 oz. to 15,000 plants	2 "
Chicory	4 lbs.
Clover, Alsike and White Dutch	6 "
" Lucerne	15 to 25 "
" Crimson Trefoil	10 to 15 "
" Large Red and Medium	8 to 12 "
Collards, 1 oz. to 5,000 plants	2 oz.
Corn, rice (shelled)	2 qts.
Corn, sweet, $\frac{1}{4}$ pint to 100 hills	6 "
Cress, $\frac{3}{4}$ oz. to 100 feet of drill	12 lbs.
Cucumbers, 1 oz. to 100 hills	1 to 3 "
Egg Plants, 1 oz. to 2,000 plants	4 oz.
Endive, $\frac{1}{4}$ oz. to 100 feet of drill	$4\frac{1}{2}$ lbs.
Flax, broadcast	$\frac{1}{2}$ bu.
Garlic, bulbs, 1 lb. to 10 feet of drill	
Gourd, 2 oz. to 100 hills	
Grass, Blue, Kentucky	2 bu.
" Blue, English	1 "
" Hungarian and Millet	$\frac{1}{2}$ "
" Mixed Lawn	3 to 5 "
" Red Top, Fancy, Clean	8 to 10 lbs.
" Red Top, Chaff Seed	20 to 28 "
" Timothy	$\frac{1}{4}$ bu.
" Orchard, Perennial Rye, Fowl Meadow and Wood Meadow	2 "
Hemp	$\frac{1}{2}$ "
Horse Radish Roots	10,000 to 15,000
Kale, 1 oz. to 5,000 plants	2 oz.
Kohl Rabi, 1-3 oz. to 100 feet of drill	4 lbs.
Leek, 1-3 oz. to 100 feet of drill	4 "
Lettuce, $\frac{1}{4}$ oz. to 100 feet of drill	3 "
Martynia, 1 oz. to 100 feet of drill	5 "
Melon, Musk, 1 oz. to 100 hills	1 to 3 "
" Water, 4 oz. to 100 hills	$1\frac{1}{2}$ to 4 "
Nasturtium, 2 oz. to 100 feet of drill	15 "
Okra, 1 oz. to 100 feet of drill	8 "
Onion Seed, 1-3 to 100 ft. of drill	4 to 5 "
" for sets	40 to 80 "
Onion Sets, 1 qt. to 40 feet of drill	8 bu.
Parsley, $\frac{1}{4}$ oz. to 100 feet of drill	3 "
Parsnip, $\frac{1}{4}$ oz. to 100 feet of drill	3 "
Peas garden, 1 pint to 100 feet of drill	1 to 3 bu.
Peas, field	2 "
Pepper, 1 oz. to 1,500 plants	3 oz.
Pumpkin 1-3 qt. to 100 hills	3 to 4 lbs.
Radish, 2-3 oz. to 100 ft. of drill	10 to 12 "
Rye	$1\frac{1}{2}$ bu.
Salsify, $\frac{3}{4}$ oz. to 100 feet of drill	8 lbs.
Spinach, $\frac{1}{2}$ oz. to 100 feet of drill	8 "

Spurry	15	lbs.
Summer Savory	$\frac{3}{4}$	"
Sunflower	8	"
Squash Summer, 4 oz. to 100 hills	2	"
" Winter, 8 oz. to 100 hills	2	"
Tomato, 1 oz. to 4,500 plants	2	oz.
Tobacco, 1 oz. to 5,000 plants	2	"
Turnip, 1 oz. to 250 feet of drill	1 to 3	lbs.
Vetches	2	bu.

## Number of Plants or Trees to the Acre at Given Distances

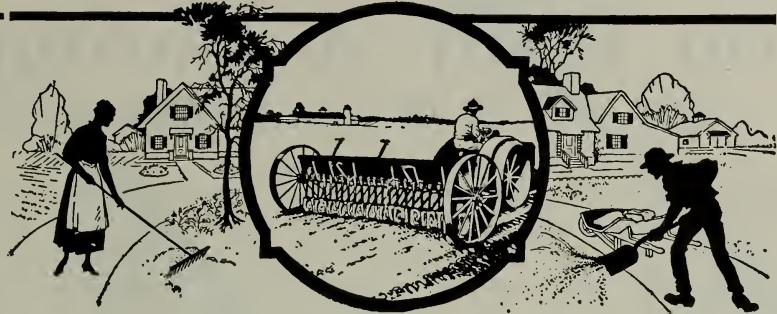
Dis. apart	No. plants	Dis. apart	No. plants
12x 1 in.	522,720	36x36 in.	4,480
12x 3 "	174,240	42x12 "	12,446
12x12 "	43,560	42x24 "	6,223
16x 1 "	392,040	42x36 "	4,148
18x 1 "	348,480	48x12 "	10,890
18x 3 "	116,160	48x18 "	7,790
18x12 "	29,040	48x24 "	5,445
18x18 "	19,360	48x30 "	4,356
20x 1 "	313,635	48x36 "	3,630
20x20 "	15,681	48x48 "	2,723
24x 1 "	261,360	60x36 "	2,901
28x18 "	15,520	60x48 "	2,178
24x24 "	10,890	60x60 "	1,743
30x 1 "	209,088	8x 1 ft.	5,445
30x 6 "	34,848	8x 3 "	1,815
30x12 "	17,424	8x 8 "	680
30x16 "	13,068	10x 1 "	4,356
30x20 "	10,454	10x 6 "	726
30x24 "	8,712	10x10 "	435
30x30 "	6,970	12x 1 "	3,630
36x 3 "	58,080	12x 5 "	736
36x12 "	14,520	12x12 "	302
36x18 "	9,680	16x 1 "	2,722
36x24 "	7,260	16x16 "	170

## Average Time Required for Garden Seeds to Germinate

	Days	Days	
Bean	5 to 10	Lettuce	6 to 8
Beet	7 to 10	Onion	7 to 10
Cabbage	5 to 10	Pea	6 to 10
Carrot	12 to 18	Parsnip	10 to 20
Cauliflower	5 to 10	Pepper	9 to 14
Celery	10 to 20	Radish	3 to 6
Corn	5 to 8	Salsify	7 to 12
Cucumber	6 to 10	Tomato	6 to 12
Endive	5 to 10	Turnip	4 to 8

## Time Required for Maturity of Different Garden Crops Reckoned from the Day of Sowing the Seed

	Days	Melon,	Days
Beans, String	.45 to 65	Water	120 to 140
Beans Shell	.65 to 70	Melon,	120 to 140
Beets, Turnip	65	Musk	135 to 150
Beets, Long Blood	150	Pepper	140 to 150
Cabbage Early	105	Radish	30 to 45
Cabbage Late	150	Squash,	
Cauliflower	110	Summer	60 to 65
Corn	75	Squash,	
Eggplant	150 to 160	Winter	125
Lettuce	65	Tomato	150
		Turnip	60 to 70



For Run Down Soil  
or General Farm Crops  
USE



*The Inoculated Soil Builder*

90% of the soils require it and it shows astonishing results. Ask us for descriptive pamphlet.

Sizes and Prices

5 Lb. Cartons - - - -	\$ .25
25 Lb. Bags - - - -	.75
100 Lb. Bags - - - -	2.00

DON'T FORGET IT IS ODORLESS

For Grounds Around  
the New Home  
USE



Thousands of years of decay have made this the ideal humus for improving soil-texture. It loosens hard clay, reducing the tendency to pack and bake. It adds the necessary bulk of vegetable matter to light sandy soils, increasing the moisture-retaining capacity.

Try it on a patchy lawn or shady spot where grass is scanty.

Sold in 100 Lb. Bags  
at \$1.75 per 100 Lbs.



LAWN---ESTATE C. W. BINGHAM, CLEVELAND, OHIO

# You Want A Garden

*that will be up to expectations*

**Y**OU want healthy full-blown roses. You want a real thick hedge. You want a thick green lawn—and you want plump, tender vegetables, matured on time. Well, you're going to have them when the rest of your neighborhood is struggling with a plot full of stunted plant life due to uncertain methods. How?

By using Nitro-Fertile the odorless, liquid fertilizer.

*What Is*

## NITRO-FERTILE

It's a scientific combination of the three essential elements of plant life—Nitrogen, Phosphoric Acid and Potash—is in quick-acting form, easy to apply, contains no weed seeds, harmless to foliage and keeps indefinitely.

It is used in the proportion of two tablespoonfuls to one gallon of water for outdoor use and one-half this strength for indoors.

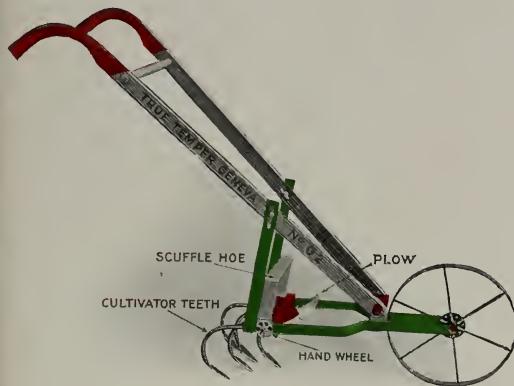
It is packed in convenient glass containers and sold at the following prices:

Half Pint.....	\$ .35	Half Gallon.....	\$1.75
Pint.....	.60	Gallon.....	3.00
Quart.....	1.00	5 and 10 Gal. Kegs.....	per gallon 2.00



ROSE GARDEN---ESTATE C. W. BINGHAM. CLEVELAND, OHIO

# True Temper Cultivators are as good as the True Temper Forks and Hoes you have been using since you were a boy



The TRUE TEMPER GENEVA is recognized everywhere as the only real quick-adjustable cultivator on the market.

It has a Scuffle Hoe, a Plow and five Cultivator Teeth, all permanently attached to a revolving steel casting.

Any of these tools may be securely locked into working position by a few turns of the Hand Wheel.

It has steel forged tools, well selected oak handles, with comfortable handle grips. Machine has 14-inch steel wheel and is nicely finished. Weight 20 pounds.

The Midget Seeder and a Turning Plow, which are sold as extras, may be easily attached in place of Drill Plow.

No. G2—Geneva - - - - - \$8.00



The TRUE TEMPER SIMPLEX weeds and cultivates with one operation and does it so easily it will surprise you.

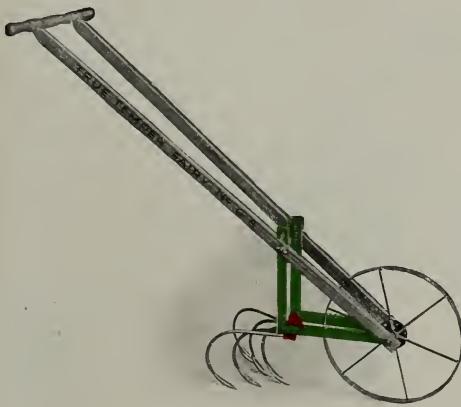
The 8-inch blade is forged from tool steel and polished. The ends are turned up to safeguard growing plants. It is V-shaped, which gives it a razor-like draw cut.

It weeds and cultivates the modern way without disturbing the roots of growing plants.

Handle is adjustable for height. It has a 15-inch steel wheel. Machine is nicely finished in red and black and varnished. Weight 13 pounds.

The Midget Seeder or Turning Plow, which are sold as extras, may be easily attached.

No. A3—Simplex - - - - - \$3.20



The TRUE TEMPER FAIRY will make gardening a pleasure, because it is very easy to operate. It will keep your garden free from weeds and keep the soil in just the right condition to make the plants grow.

It has a strong steel frame with best selected ash handles easily adjusted for man or boy.

The five Cultivator Teeth are forged from high-grade tool steel. They are adjustable in many ways, as each tooth is bolted on separately. The Fairy will cultivate rows from six to twelve inches apart—just the machine for your home garden.

It has a 14-inch steel wheel. Machine is nicely finished in colors and varnished. Weight 12 pounds.

No. G5—Fairy - - - - - \$3.20



The TRUE TEMPER STANDARD No. 20 is the most popular and best selling High Wheel Cultivator on the market.

It has a 24-inch wheel, which runs on a bushing, is well balanced and easy to operate.

Adjustment is made with one wing nut—no wrench is needed.

Attachments furnished: Double Point Shovel, Turning Plow with landside, combined Rake and Sweep.

These tools are made of high grade tool steel, hardened and polished. They will scour and work perfectly in any soil.

The Midget Seeder may be easily attached with one bolt. Weight, 19 pounds.

No. 20—Standard - - - - - \$5.20

**Write us for discount on above prices**

# These Two Cultivators and our No. 14 Seeder are made especially for Market Gardeners. All Machines Guaranteed



The TRUE TEMPER SPECIAL is the very best double-wheel cultivator that nearly a hundred years of tool-making experience can produce.

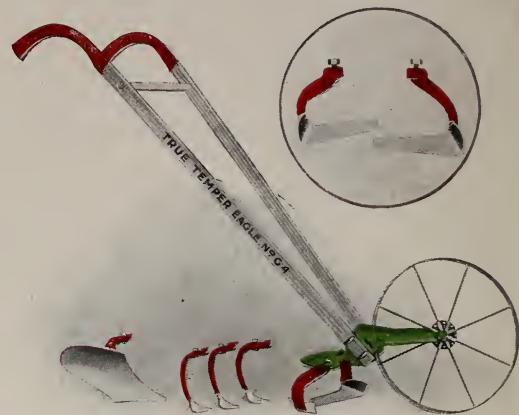
Frame is made of high-grade steel. It has dust-proof, machined bearings with adjustment for wear. The wheels run true.

Attachments are forged from tool steel, hardened and polished. Not a rivet or weld in them.

Has 14-inch steel oval-spoke wheels, Finest second growth white ash handles with comfortable handle grips that fit the hand. Machine is beautifully finished.

Equipment includes two Scuffle Hoes, four Cultivator Teeth and two Plows. Weight with one set of tools about 20 pounds. Choice of tools sold with each cultivator as follows:

No. G1 —Full equipment of tools - - -	\$14.00
No. G1A—Two Hoes and four Cultivator Teeth	12.40
No. G1B—Two Hoes - - - - -	11.40



The TRUE TEMPER EAGLE is a single-wheel cultivator. Like our double-wheel True Temper Special, it is made especially for market gardeners.

It has a steel frame with a 15-inch steel wheel, supported on each side at the axle.

Handles are made of best selected oak with handle grips that rest the hands and arms while cultivating.

Attachments are forged from tool steel, hardened and polished. Machine is handsomely finished in colors and varnished. Weight with one set of tools about 12 pounds.

Equipment includes two Scuffle Hoes, three Cultivator Teeth, one large Turning Plow with landside. Choice of tools sold with each cultivator, as follows:

No. G4 —Full equipment of tools - - -	\$9.70
No. G4A—Two Hoes and three Cultivator Teeth	8.30
No. G4B—Two Hoes - - - - -	6.50



The TRUE TEMPER STANDARD SEEDER is made especially for the market gardener and vegetable growers.

The seed is fed by means of a rotary bristle brush which gives a constant steady flow without injury to the seed.

It will plant almost any kind of seed in hills, four, six, eight, twelve and twenty-four inches apart or will drill a continuous row accurately.

Seeder is very simple in construction and easy to operate. By slightly moving one part, it is changed from hill to drill sowing.

The index is in plain view and easily adjusted. A special adjustable shoe will open a clean furrow and the Coverer swings free. A concave roller completes the job.

This Seeder opens the furrow, sows the seed, covers up, rolls down and marks the next row all in one operation. Weight 36 pounds.

No. 14—Seeder - - - - -	\$13.20
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The MIDGET SEEDER will pay for itself in a short time, because it saves seed by sowing accurately. Sowing by hand wastes seed.

It is very easy to operate and drills almost any kind of garden seed from the smallest up to peas and beans. With ordinary care this seeder will last a lifetime.

The index is in plain view and easily adjusted. The shoe is adjustable for any depth desired, and the Coverer swings free.

The Midget opens the furrow, sows the seed and covers up, all in one operation.

It is sold with handle complete, or may be easily attached to almost any wheel cultivator. Weight 6 pounds.

No. 1H—With Handle - - - - -	\$5.40
No. 1 —Without Handle - - - - -	4.80

**Write us for discount on above prices**



